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Peppermint Oil Lagging

Peppermint oil output right now is not what it was last year. Spearmint, on the other hand, is stronger.

The August forecast of peppermint oil production from the Department of Agriculture is 2,024,000 pounds, 13 percent less than last year but 8 percent more than average.

For the spearmint crop, the department is predicting an output of 1,188,000 pounds, 59 percent more than last year and more than twice the average.

In its latest crop report, the department has the following to say about the development of the two crops:

Peppermint—Prospects in Oregon declined as wet weather in May held back growth and made it difficult to carry out effective spray operations. Stands are uneven and growth was behind schedule on August 1.

Hot weather during June and July depleted soil moisture and wilt was common in Linn and Marion Counties. Spider mites have caused some damage in Jefferson County.

Hot July weather in Washington improved conditions, but failed to compensate for damage done by cold weather and freezes early in the season in eastern Washington.

Wisconsin mint suffered as a result of unfavorable weather early in the season.

In Michigan, harvest began near the end of July. Cutting of the Indiana crop was nearly half completed on August 1. Favorable weather during July improved yield prospects.

Spearmint—Harvest in Michigan and Indiana is under way, with yields slightly lower than 1959.

Harvest in Washington began around July 25 and was in full swing around August 1. Yields are running slightly lower than last year but acreage is sharply above 1959 and average.

Drug Rules Revision: Big Idea Okay But Little Details Are Troublesome

Drug manufacturers have no quarrel with Food & Drug Administration on the principle involved in the agency's proposed revision of regulations for new drugs. It's when they get into the details of the new regulations that the two have a parting-of-the-ways. But producers are confident that before the revisions become effective, which may be before the end of this year, they will be able to convince the agency of the errors in its thinking so that the necessary changes can be made in time.

COMPANY OFFICIAL: Clifton C. Candee, elected vice-president of Holland Color & Chemical Company, Holland, Mich., a subsidiary of Chemetron Corporation.

In fact, producers are in such a state of accord with FDA on principle in the regulations that they feel a few round-table talks with officials can quickly straighten out the difficulties. That, they argue, would make it unnecessary to go through a long tedious and expensive public hearing.

PMA to File Brief Shortly

Pharmaceutical Manufacturers Association, as spokesman for the class of drug manufacturers who would be chiefly affected by the new drug regulation changes, is planning to file a brief with the agency within a few days, making known its feelings in this matter.

Industry has until September 22 to comment on the FDA's proposed changes in the new drug rules that were published in the *Federal Register* July 22.

But, in the meantime, PMA has let it be known that it is in whole-hearted accord with the principle of supplying the physician and the pharmacist with full information about indications, dosages and pertinent hazards of use of all prescription drugs.

It also approves the principle that misleading statements must not be made in any advertisement and agrees that drug claims should not exceed the scope of the statement filed with the new drug application.

The industry's position on the FDA amendments to the new drug regulations

—*Continued on page 49*

Monsanto on Maleic: The World's Biggest

Monsanto Chemical Company, which has just gone on stream with another 20 million pounds of production capacity at St. Louis, Mo., now lays claim to being the world's largest maker of maleic anhydride.

With the expansion, the company says it has boosted its potential output 50 percent to a total of 60 million pounds or maleic a year.

US producers are turning out maleic anhydride at a rate of 85 million pounds a

—*Continued on page 56*

Barrett Breaks Ground For Novel Gypsum Unit

Allied Chemical Corporation will build the world's first chemical gypsum plant at Claymont, Del. Ground has been broken for the plant by Allied's Barrett Division.

Gypsum will be made from a byproduct of phosphoric acid, produced by General Chemical Division of Allied at Claymont. The new Barrett process will make gypsum identical to that from natural ore, the company says.

OPD Reports From Europe

US Chemical Money Pours Into France for Sales Offices, Plants and Joint Ventures

American chemical producers—led by the drug companies—are moving into France to set up sales distribution offices, manufacturing facilities and joint ventures with French firms. A tally shows that more than twenty-five US chemical operations have been established in France over the last few years. This is part of the big jump in US investment in the six Common Market nations, a leap from a total of $640 million in 1950 to nearly $1.8 billion at the end of 1959. Western Germany, with total US investments of $574 million, ranks as the top site for American capital. France follows closely behind with $527 million.

Drug Investments by Nine US Firms

Drug investments in France have been made by at least nine US pharmaceutical producers. Abbott Laboratories, Miles Laboratories, E. R. Squibb & Sons Division of Olin Mathieson Chemical Corporation, Chas. Pfizer & Co., Upjohn Company and Vick Chemical Company are among the concerns already established in some fashion in France.

On top of this, Bristol Laboratories division of Bristol-Myers Company, Eli Lilly & Co. and Mead Johnson & Co. are in the process of setting up installations.

Squibb has an arrangement with the big French antibiotics producer, Ste. Francaise des Antibiotiques (SIFA). Upjohn reportedly has a deal with Chimique Atlantique for French distribution of Upjohn specialties in France, particularly hormone drugs. Pfizer produces antibiotics in France directly.

Among the companies with general chemical investments in France are:

Bristol-Myers, California Spray-Chemical Corporation (DDT and other insecticides), Diversey Corporation (detergents and insecticides), Dow Chemical Company in association with the big French firm Pechiney (styrene plastics), Harshaw Chemical Company, Olin Mathieson, Pittsburgh Plate Glass Company (chemical products), Procter & Gamble Company (detergents) and Reichhold Chemicals, Inc. (plastics).

Chemical firms now moving into France

—*Continued on page 39*

PROMOTED: George J. Sella, Jr., appointed sales manager of the rubber chemicals department of American Cyanamid Company in Bound Brook, N. J. He had been the department's product manager.

Drug Makers, Please Note! Kefauver Is Back Sept. 7

The Kefauver anti-monopoly committee in the senate is starting up its investigation of pricing practices in the ethical drug industry again September 7.

The committee has announced six days of hearings in this latest series that will be devoted to antibiotics preparations.

This is the fourth set of hearings on "administered prices" in the prescription drug industry in the current inquiry which began last September. Earlier investigations have dealt with pricing practices of

—*Continued on page 38*

Benzene Process In First Real Test

Benzene producers—both actual and potential—have their eyes riveted on Silsbee, Tex., about twenty miles north of Beaumont, where next week Southampton Refining Company will start up the world's first hydrodealkylation ("Hydeal") unit.

The installation, only a loud rumor in the trade until officially confirmed by OPD last week, will have an initial yearly capacity of 4.5 million gallons of benzene.

Southampton, which is also putting in an aromatic and hydrogenation unit, feels that because of its size it will be in an excellent position to do custom processing.

While it plans to market benzene at the outset, petroleum naphthalene operations are not outside the realm of possibility for the future.

Though naphthalene is an uncertainty, of one thing the company is sure right

—*Continued on page 52*

Kohnstamm Invests In Cory of London

H. Kohnstamm & Co., an old-time New York producer of food colors and pigments, has made what it calls a "substantial" investment in Horace Cory & Co., Ltd., an old London, England, pigment maker.

As a result of the investment, Cory will now manufacture Kohnstamm dyestuffs and pigment colors for sale throughout the Commonwealth, the "outer seven" trading areas and other specified countries. Cory is also set to build a new plant on the outskirts of London.

Just how old are these two oldtimers? Kohnstamm was established in 1851 and Cory in 1828.

Paraffin Suppliers Seethe Over Wax Coup in Mexico

US paraffin suppliers are seething over a major marketing coup scored in Mexico by National Wax Company of Chicago.

National has tied up Pemex (Petroleos Mexicanos), the Mexican government's petroleum monopoly, in an exclusive barter deal calling for the shipment of one barrel of US paraffin wax to Mexico in return for one and a half barrels of residual oil.

Upshot of the transaction is that other suppliers of paraffin, which have been shipping some 15,000 tons of wax a year south of the border, are now shut out of the lush Mexican market.

A National spokesman estimates that the yearly exchange with Mexico will amount to 15,000 to 18,000 tons of paraffin wax and 180,000 to 200,000 barrels of residual oil.

The contract, which has no expiration date but may be cancelled upon ninety days notice, represents some $3 million in annual paraffin business to National. The dollar value of the residual oil is pegged at around $240,000.

To meet its Mexican commitment, National—which is a chemical brokerage firm—will be supplied with the necessary paraffin wax by Texaco, Inc., New York.

What National will do with the Mexican residual oil is a question, since the United States permits the oil into this country only under a strict quota system.

Probable answer: National will transship the oil to other foreign markets or it will try to peddle the fuel for use by foreign vessels at US ports.

This Mexican deal is only one—but, perhaps, the most serious—problem facing US exporters of paraffin wax. Business abroad is tightening because:

Item: Brazil has just opened up a new refinery of its own.

Item: Union of South Africa has passed an anti-dumping duty against US wax. Oddly enough, the tariff does not apply to Indonesian or Japanese paraffin.

Chemical People Want to Know Who Is the Escape-Clause Boss

Tariff and trade experts in the chemical industry are waiting on the Supreme Court of the United States for the final word on a question now uppermost in customs circles: Can the President modify a recommendation of the US Tariff Commission in escape-clause cases? The Department of Justice is refusing to accept the ruling of the Court of Customs & Patent Appeals on this issue and is dumping the matter into the lap of the high court. In an unusual public notice, Attorney General William P. Rogers has just announced how he plans to do it.

He reports that the government will ask the supreme court to review the imported bicycle case in which two lower courts have found that Tariff Commission remedies in escape-clause cases are presented to the President on a "take-it-or-leave-it" basis as a result of changes written into the trade agreements law by congress.

Formal Announcements Rare

The Attorney General's announcement was unusual because it is seldom that the department makes a formal announcement of its appeals and even more seldom that it appeals from decisions of the US Court of Customs & Patent Appeals. It is also a well known fact that the supreme court seldom reverses the customs appeals court.

While the immediate question at issue is the right of the President to disregard the recommendations of the Tariff Commission on imported bicycles, indirectly involved are such matters as the quota system established in 1958 on lead and zinc and the validity of escape-clause proclamations on spring clothes pins and clover seed.

When the lead and zinc case was submitted to the President two years ago, he had the choice of two recommendations from the Tariff Commission—three commissioners proposed that lead and zinc tariffs be increased to the maximum allowed by law and that imports also be put under quota; the other three members favored a simple restoration of the 1930 tariff rates.

The President rejected both recommendations and established a quota system for unmanufactured lead and zinc, equal to 80 percent of the average annual commercial imports during the five-year period 1953-57.

Both the customs court and the customs and patent appeals court ruled that con-

—*Continued on page 52*

Tiffany the Jeweler Dabbles in Chemistry

Tiffany & Co., the fashionable New York jewelery firm, has moved into the chemical business—sort of.

The concern has just perfected a chemical compound for tarnish-proofing sterling silver, and says it is effective against the precious metal's most formidable enemies: salt, sulfur, acetic acid and heat.

The process has not been patented. It is a company secret and won't be licensed—at least, not yet. The Tiffany compound may, in the future, be found useful for protecting other metal objects, officials of the jewelry firm say.

Phosphoric's Future Appeals to Cyanamid

American Cyanamid Company, sure of the future for wet-process phosphoric acid, is planning a multi-million dollar addition at its production installation in Brewster, Fla. The New York-based company says the new facilities will make possible a doubling of output.

The unit will also provide an increased tonnage of triple superphosphate. This product and phosphoric acid will be marketed by Cyanamid's agricultural division.

The Brewster plant is located in the heart of the Florida phosphate pebble field. With the planned addition, the plant will be capable of producing approximately 400,000 tons of wet-process 54 percent phosphoric acid annually.

"During the past fifteen years," the company notes, the use of fertilizer has tripled. We expect it to double or triple again within the next twenty-five years. Cyanamid has been a principal supplier of basic agricultural chemicals to other manufacturers. Our present expansion is part of our continuing program to maintain this position."

Allied Cuts Polyethylene

Allied Chemical Corporation, New York, has cut the price on five of its eight low-molecular weight polyethylene grades. The reductions, which range from 1½ cents to 5 cents a pound, are retroactive to August 1.

Texaco Starts Installation For Cumene in New Jersey

Texaco, Inc., is now in production at its new 70-million-pound-a-year cumene plant at Westville, N.J.

The new facility is aimed at meeting stepped-up needs for raw material by synthetic phenol producers. Texaco estimates that the US will be producing some 725 million pounds of phenol by 1964, as compared to 518 million pounds in 1958. Most of this will be synthetic.

Texaco, which will make its cumene from propylene and benzene, says its installation has been specifically designed to produce an exceptionally high-purity product.

The Week's Price Changes

Corn Oil, Corn Syrup, Sandalwood Oil, Soybean Advanced. Acrolein, Casein, Cottonseed Oil, Soybean Oil, Tin Reduced.

Price Advanced

Corn oil, crude, ¼c. per lb. (p. 57).
Refd., ¼c. per lb. (p. 57).
Corn syrup, 43 Be., 15 to 36c. per cwt. (p. 36).
Grapefruit oil, 75c. per lb. (p. 51).
Sandalwood oil, $1 per lb. (p. 51).
Soybean meal, unrestrict., $1 per ton (p. 57).

Prices Reduced

Arolein, 15c. per lb. (p. 36).
Casein, Australian, ¼c. per lb. (p. 55).
Coconut oil, crude, Pac. coast, ½c. per lb. (p. 57).
Copra, $7.50 per ton (p. 57).
Corn oil foots, 95%, ½c. per lb. (p. 57).
Cottonseed oil foots, 95%, ¼c. per lb. (p. 57).
Geranium oil, Bourbon, $1.50 per lb. (p. 51).
Greases, ½c. per lb. (p. 57).
Linseed meal, 50c. per ton (p. 57).
Menhaden oil, crude, ¼c. per lb. (p. 57).
Soybean oil, foots, 95%, ½c. per lb. (p. 57).
Tallow, inedible, ½c. per lb. (p. 57).
Tin metal, 2c. per lb. (p. 31).
Salts, ½c. to 3/5c. per lb. (p. 31).

OPD Price Index

THE OIL, PAINT AND DRUG REPORTER'S relative record of prices of chemicals and related materials is currently as follows:

(100=1949 average)

August 19, 1960	August 12, 1960	August 21, 1959
109.62	109.72	109.40

Chemical Stocks: Blue Chip

Chemical industry shareholders are still getting more and more dividends for their holdings. The Office of Business Economics of the Department of Commerce reports that cash dividends paid by the chemical companies issuing public reports rose again in July over the preceding month to bring the seven-month total to $526.2 million. This compares with $500.7 million for the first seven months of last year. The July cash dividends amounted to $32.8 million, which compared with $30.6 million in July last year.

July cash dividends exceeded those of the same month a year ago in all categories except electrical machinery, where they declined by the small margin of $600,000, and the electric light and power industry, where a drop of $6.8 million was recorded.

Higher seven-month totals were reported for all groups except oil refining, which recorded a $23 million drop, transportation equipment which recorded a drop of $8.5 million, and railroads where dividends are running $17.4 million below last year.

Oil refining company dividends in July amounted to $4.3 million compared with

—*Continued on page 62*

MEMO TO OPD READERS:

OPD's next edition -- the 1960 Chemical Buyers Directory Issue -- will be mailed to subscribers this week.

An 1840-page bound volume, the Buyers Directory is a comprehensive listing of suppliers for some 8,000 different chemicals and related process materials.

Next Monday's issue (August 29) will be in OPD's regular format.

Fertilizer Plants in India Are United by Government

The Indian government is putting its shoulder behind the fertilizer industry. The result: merger of Sindri Fertilizer Works with Hindustan Chemicals & Fertilizer, Ltd.

Sindri, with addition of new plants in 1959, boosted its output by 50,000 tons of urea and ammonium sulfate-nitrate. Hindustan Chemicals' Nagal fertilizer project will start up late this year.

The company will also undertake a small but priority project for the produc-

—*Continued on page 38*

Penick Labels Metrically

Although not required to do so before January 1, the NYQ Chemical Division of S. B. Penick & Co., New York, is now labeling and billing all narcotics under the metric system. The company says that its conversion has been done in advance to aid all its customers in converting their records before the deadline.

Carbide's 'Hello' to Shell: A 15-Cent Cut in Acrolein

Prices for acrolein were reduced 15 cents per pound across the board last week by Union Carbide Chemicals Company, a division of Union Carbide Corporation, New York. Under the new schedule, the tankcar price is 31 cents a pound, f.o.b. works.

The significant price reduction foreshadows the debut of a new producer. Shell Chemical Company is expected to begin shipments of acrolein from its new plant at Norco, La., within the next few weeks.

According to a spokesman for Shell,

—*Continued on page 62*

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MIDWEST HIS TERRITORY: Robert L. Bucher, made midwest regional sales manager for Delhi-Taylor Oil Corporation, a new position created because of the company's rapid expansion in the chemical field.

USI Is Moving Ahead In Different Directions

US Industrial Chemicals Company has just taken a giant step in the polyethylene field and is also coming right along in ammonia. Such is the word from New York headquarters of this division of National Distillers & Chemical Corporation.

Regarding polyethylene, the company reports that it has just gone on stream with a new section of its production plant at Houston, Tex. The achievement reportedly makes USI the second largest producer of the material in the world.

In another part of the country—Tuscola, Ill.—ammonia production has been increased by 17 percent at the USI plant, and storage capacity for anhydrous ammonia is going to be expanded.

The unit is already operating at the expanded rate of 70,000 tons per year and latest reports are that a new 6,000 ton storage facility is expected to be in full service by the end of the year.

The expansion at the Houston polyethylene unit brings the company's total production capacity of "Petrothene" low- and medium-density polyethylene resins to 300 million pounds per year.

USI has grown rapidly in the polyethylene field. Its first plant with a 25-million-pound annual capacity went on stream at Tuscola in early 1955. This plant was doubled in 1956 and redoubled in 1957 to a capacity of 100 million pounds.

In early 1959, another plant in Texas started up with a 75-million-pound annual capacity (soon increased to 100 million pounds). This new expansion brings that plant capacity up to 200 million pounds.

The increased ammonia production and storage capacity are needed to assure

—Continued on page 62

Goodrich Chemical Enters The ABS Polymer Market

B. F. Goodrich Chemical Company, which bills itself as "the world's largest producer of vinyl resins," is getting into the ABS (acrylonitrile-butadiene-styrene polymers) market.

The Cleveland, Ohio, firm reports a family of materials—to be known as "Absen" resins—will be produced in quantity at its Akron plant. The company has been marketing developmental quantities of it under the name "Good-rite Polyblend" for some time.

ABS materials are described by Goodrich as tough thermoplastics that are easy to process on conventional extrusion,

—Continued on page 52

Caustic-Chlorine Expansions World Over Cue to Big Future For These Twin Inorganics

Caustic-chlorine plant expansions throughout the world illustrate not only a bright future for the two chemicals, but a brilliant past as well. World caustic output in 1959 passed 10 million metric tons for the first time—up 14.2 percent over 1958. Chlorine output reached 6.9 million metric tons. Looking back thirty years, it can be seen that chlorine output has increased more than sixteen-fold, and caustic soda, nearly seven-fold since 1929. Strong demand for chlorine has been a key reason for expansion of both chlorine and caustic facilities here.

Early in 1960, Hooker Chemical Corporation slated a boost in caustic-chlorine capacity at Niagara Falls, N.Y. Stauffer Chemical Company expanded its facilities at Henderson, Nev.

Pennsalt Chemicals Corporation completed a $6 million modernization of its Wyandotte, Mich., facilities around the turn of the year. Olin Mathieson Chemical Corporation is adding 125 tons a day to its capacity at McIntosh, Ala.

Diamond Alkali Company, Jefferson Chemical Company, Stauffer Chemical (at Niagara Falls, N.Y.), Olin (also at Niagara Falls) figure among other expansion plans proposed or carried out within recent months.

Average annual world growth rate for caustic soda since 1950 has been 7.2 percent per annum, notably below that for chlorine, which has been at 13 percent per year since that time.

The discrepancy in growth rates illustrates a problem faced by the alkali in-

—Continued on page 33

Caustic World Growth*

FREE WORLD:	1959	1955
Africa	50,000	22,000
Austria	60,000	48,400
Australia	45,000	27,000
Belgium-Luxembourg	35,000	47,000
Britain	800,000	800,000
Denmark	3,000	2,000
France	500,000	435,300
India	66,000	34,200
Italy	335,600	266,000
Japan	742,300	501,800
Netherlands	80,000	60,000
Norway	45,000	35,400
Pakistan	3,000	3,000
Philippines	2,500	2,000
Portugal	20,000	12,000
Sweden	150,000	99,200
Switzerland	25,000	18,000
Taiwan	26,000	15,700
West Germany	699,500	556,100
USA	4,242,000	3,552,000
Other European	202,000	135,000
Other American	595,000	306,000
Total	8,726,900	6,978,100
COMMUNIST BLOC:		
Bulgaria	17,000	2,400
Czechoslovakia	100,000	82,000
East Germany	303,400	256,900
Hungary	25,000	11,700
Poland	158,600	101,000
Red China	300,000	150,000
Rumania	64,000	23,500
USSR	650,000	518,000
Yugoslavia	47,900	30,700
Total	1,665,900	1,176,200
World Total	10,392,800	8,154,300

*Thousands of metric tons.

Plastics Mounting Attack On Paper Container Area

Plastics—styrene in particular—are set for a massive invasion of the drinking cup field.

Scott Paper Company will spend $3 million for expansion of two of its non-paper products: plastics drinking cups for hot beverages and "Scottfoam," a laminate used on fabrics as an air filter.

Hot on the heels of Scott's announce-

—Continued on page 37

NEW MANAGER: Joseph N. Borglin, appointed manager of customer service in the pine chemicals division of Hercules Powder Company's naval stores division.

Cowles Augments Metal Finishing Line

In a move which puts it deeper into metal finishing products, Cowles Chemical Company of Cleveland, Ohio, has bought for an undisclosed amount of cash the Promat Division of Poor & Co., Chicago manufacturer of railroad equipment and supplies.

Promat manufacturers and distributes metal finishing specialty chemicals, including electroplating additives, brighteners and metal coloring processes.

The acquisition is expected to neatly complement Cowles' own line of metal cleaners, zinc phosphate coatings and other metal treating chemicals.

For the time being, Cowles will continue to manufacture Promat products at Poor's plant in Waukegan, Ill. Sales and servicing of these products will continue to be handled by the Promat organization.

Enjay Chemical Division Is Divided Into Two Parts

Enjay Chemical Company has split its former chemical section into two new product units: the industrial chemicals division and the chemical raw materials division.

According to Enjay, a New York-headquartered division of Humble Oil & Refining Company, the split was made necessary by "the increasing complexity of Enjay's chemicals business and the large number and volume of chemicals that are currently handled by the chemicals division."

A. C. Matthies, former product manager of the chemicals division, will serve as product manager for industrial chemi-

—Continued on page 38

Nickel Question Answered Now: Fidel's Taking It

On August 1 OPD asked a vital question in a lead-page news story: Where will Cuba's Fidel Castro get the nickel and cobalt he has promised Red China's Mao Tse-tung? Today the whole world knows the answer: He will take it from Moa Bay Mining Company.

The answer to the question became readily apparent last week when the island dictator's government "intervened" in the ownership of Moa Bay, a subsidiary of Freeport Nickel Company, which in turn is a wholly-owned subsidiary of New York-based Freeport Sulphur Company.

What 'Intervention' Means

"Intervention," according to the latest totalitarian jargon in Cuba, means the start of "taking over," and that, some say, means that the American owners of the $75 million complex might just as well kiss it off.

But some observers feel that the term "intervention" may mean that only a temporary step has been taken. They think the Cubans moved a bit slowly because they do not have sufficient know-how to run the plant.

Just what to do with the slurry from the installation is a question that is likely to bother Castro's engineers. Highly-specialized facilities are required to handle the material. Cuba has a commercial pact with the Poles covering the sale of nickel, and mining experts in this country think such facilities might exist in Poland.

Freeport still has one strong point in its favor. It owns the only plant in the Western Hemisphere that can process the slurry. Some persons close to the developments think that for that reason the Cuban government will hold the door open for further negotiations.

Freeport Nickel is not going to go down without a fight. It promises to "take all possible steps under Cuban law and under international law to protect its legal rights."

But, at the same time, Cuban President Dorticos says his country is unable to make "prompt and cash payment" for anything it seizes or nationalizes.

As far as operation of the plant is concerned, the seizure is only a technicality.

—Continued on page 49

Butanol, Carbon Black Go To Ivan; Not So Plastics

Ivan can get butanol and carbon black from the US. But nothing doing as far as polyethylene and ion-exchange resins are concerned. This is the ruling of the Department of Commerce for the export licensing period April-June.

Principal commodities approved for export to eastern Europe include butanol (worth $592,500) to the USSR and carbon black ($424,237) to Rumania and USSR. The government blew the whistle, however, on projected shipments of $1,564,834 of polyethylene to Czechoslovakia and the Soviet Union and $159,930 of ion-exchange resins to the latter country.

Seasoning denial with largesse, Commerce approved seventeen applications to export technical data relating to industrial equipment and process and plant technology for non-strategic petrochemicals and chemicals.

Most of these applications were submitted by US firms pursuant to Soviet bloc requests for quotations. If negotiations are successful, dollar value could amount to many millions.

Perchloroethylene Output Is Due in the Northwest

Hooker Chemical Corporation expects to be producing perchloroethylene in the northwest by September 1.

The New York-based chemical company is installing a new production unit for the material at its chlor-alkali plant in Tacoma, Wash. Hooker says the newly-built facility will be "the first perchloroethylene producing plant in the northwest and only the second such plant in the western United States."

Ammonia Unit Finally Sold; Smith-Douglass Gets It

Smith-Douglass Company, Norfolk, Va., is now the owner of the ammonia plant in San Jacinto, Tex. General Services Administration last week decided to accept the company's offer of $2.6 million for the warborn project that played a major role in meeting ammonia needs during the war and postwar periods.

The eastern fertilizer firm was the sole bidder for the plant at the competitive bid sale held on August 1 for the entire San Jacinto Ordnance Depot.

Smith-Douglass holds an operating lease on the plant which is due to run until 1974. The plant is capable of producing about 110 tons of ammonia a day.

Certain patent rights, know-how and other rights involved in the ammonia project—which were vested in Hercules Powder Company and the companies, L-Air Liquide Societe Chimique de la Grande Paroisse—did not go along with the plant in the sale.

Use of these properties will be subject to arrangements between Smith-Douglass and the owners.

GSA also decided to accept the bid of the Missouri-Pacific Railroad of $303,000 for all the railroad facilities at the depot, and is still considering a bid of the Houston Ship Channel Navigation District of $4 million for six waterfront land tracts.

The district had also submitted an alternate bid of $8 million for the entire depot, including the ammonia plant, but this was turned down.

All other offerings received at the August 1 bid opening have been rejected by GSA. The unsold parcels will be readvertised this week for a bid opening September 21.

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Antibiotics 1959 Leaders

Antibiotics, in terms of value, were the most important medicinals produced in 1959.

So reports the Tariff Commission, in a preliminary review of the medicinals picture for last year. Detailing the performance of antibiotics as a group, the tariff people report that sales in 1959 amounted to 2 million pounds, an increase of 5 percent above the previous year.

Value of the total product was put at $318 million for 1959, which was 4.2 percent above the previous year's figure.

However, there was a 13 percent decrease in the total production of antibiotics. Overall output, for both human and veterinary use, in 1959 was 2.3 million pounds. This represented a 13 percent drop from the 2.6 million pounds reported for 1958.

Among the other important groups of medicinals produced in 1959 were the vitamins, combined output of which was 11 million pounds, compared with 9.8 million pounds in 1958. Sales of all vitamins in 1959 totaled 7.3 million pounds, valued at $76.6 million.

Sales of hormones in 1959 amounted to 42,000 pounds, valued at $23.3 million. The output of sulfa drugs in 1959—5.8 million pounds—was 36.2 percent larger than the 3.7 million pounds produced in 1958.

The medicinal produced in largest quantity in 1959, as in previous years, was acetylsalicylic acid (aspirin), the output of which was 18.1 million pounds.

Production of barbiturates totaled 819,000 pounds in 1959—only 29,000 pounds more than the output in

—*Continued on page 34*

Kefauver's Anti-Drug Attack Puny; This Time a College Dean Says So

Sen. Kefauver's recent attacks on the drug industry did not amount to very much! First a New York bank said it (OPD, 8/8/60) and now a college dean is stating the same thing. Latest to get on the anti-Kefauver bandwagon is Dr. Howard C. Newton, dean of Massachusetts College of Pharmacy and retiring president of the American Pharmaceutical Association. His remarks about the Tennessee legislator's efforts came at the closing of the APhA convention in Washington, D. C., last week as Dr. Newton turned over the gavel to his successor, Ronald V. Robertson, a Spokane, Wash., pharmacist.

SPEAKER: E. E. Fogle, president of Union Carbide Chemicals Company, a division of Union Carbide Corporation, will be keynote speaker at the October 1-November 3 meeting of the Federation of Societies for Paint Technology in Chicago.

Scores 'Dubious' Health Care Legislation

Pinpointing a major problem of immediate importance, Dr. Newton said, "At a time when the American health team, including pharmacy, is doing a better job than has been done by any other in any place at any time and is continuously improving its service through education and research, we find serious legislative attempts to change all this in favor of a very dubious system of 'socialized' health care."

Then, turning to the recent Kefauver investigations, Dr. Newton said they had brought about indirect benefits to the drug industry. Continuing, he made these points:

- "The direct attack on one segment of the pharmaceutical field has brought all segments of it more closely together.
- "An environment has been created in which pharmacy's inspiring story can

—*Continued on page 46*

Allied-AP&CC Merger Off

Merger of Allied Chemical Corporation and American Potash & Chemical Corporation won't happen. That's the word from Peter Colefax, president of the latter. Reports of merger discussions between the two companies circulated in the trade last week. Mr. Colefax says the possibility was discussed and dropped. He gives no reason.

Petroleum Chemicals Loses Its Chairman, Bruce Brown

Bruce K. Brown, who served as deputy administrator of the Petroleum Administration for Defense during the Korean War, has resigned as chairman of the board of Petroleum Chemicals, Inc., New Orleans, La.

Mr. Brown, a former vice-president and director of Standard Oil Company (Indiana), will establish an office as a business consultant in the Oil & Gas Building in New Orleans on September 1.

Fertilizer Output of the World Not Likely to Lose the Steam It's Been Generating for Years

World production of fertilizer, which has been booming for the past two decades, is yet to show any signs of losing its steam. In the past twenty years, the world industry has almost trebled its level of operations and will expand another 15 percent to a probable total of 28 million metric tons within the next five years. Israel is leading the way in the expansion parade with planned increases totaling about 800,000 tons in its capacity.

These salient facts about the industry, with some brief references to future expansions, are contained in the 1959 annual review prepared and released last week by the Food & Agricultural Organization.

The report covers the six-year period 1953-54 to 1958-59 and is based on reports from most all the major fertilizer producing or consuming countries with the exception of Russia, Red China and North Korea.

Some Red Holdouts

Four of the Russian satellites—Bulgaria, Czechoslovakia, Hungary and Poland—participated in the survey for the first time this year.

The report places total production of fertilizer in the 1958-59 crop year at 24.3 million tons, consumption at 22.9 million tons and international trade at 6.3 million tons. The report also contains these points:

- Of the three main plant nutrients, nitrogen showed the largest increase in production. Potash output also rose at a rapid rate, but production of phosphoric acid advanced more slowly.
- The biggest percentage rise in production and consumption of all fertilizers took place in Asia—66 percent in 1958-59 compared with 1953-54.
- European production of all fertilizers was 56.6 percent of the world total.
- Consumption per 1,000 hectares of arable land (cultivated land plus temporary meadows and pastures) was highest in New Zealand, with 453.09 metric tons. Consumption per 1,000 hectares of agricultural land (cultivated land plus permanent meadows and pastures) was highest in Belgium, with 204.95 metric tons.

The combined output of the three major kinds of fertilizers (nitrogen, phosphoric acid and potash) in 1958-59 or 24.3 million tons was 8 percent over the

—*Continued on page 47*

IN NEW POST: Richard H. Dorsett, named southwestern sales manager for the organic chemicals division of Witco Chemical Company, New York. He had been with the sales force in Dallas, Tex.

Caprolactam Monomer Hike Slated by Allied at Hopewell

Allied Chemical Corporation, reflecting the intensified tire cord race among rayon, nylon 6/6 and nylon 6, will start construction today (August 22) on a 75 percent expansion of its caprolactam monomer plant in Hopewell, Va.

The increase will bring the plant's capacity to an estimated 100 million pounds a year by mid-1961.

The caprolactam monomer will be used in Allied's currently expanding facilities at Chesterfield, Va., for the manufacture of caprolactam polymer, "Golden Caprolan" tire cord and other industrial and fabric units. The plants are run by National Aniline Division.

FDA Time Extensions Go to 800 Flavorings

Food & Drug Administration has granted time extensions—until March 6, 1961—to some 800 synthetic flavoring substances and adjuncts. The agency says the food additives may be used in food until the cut-off date or until it establishes or denies tolerances for the materials or until it exempts them from tolerance requirements.

The action follows in the wake of an FDA announcement that it means to recognize as safe some twenty-seven flavoring agents (OPD, 8/15/60).

In another action, the agency extended the effective date of the law regulating plant defoliants to next March 6 as it applies to the sodium salt of b-naphthoxy acetic acid when used on fruit and vege-

—*Continued on page 43*

Bates Chemical Is Sold To Crompton & Knowles

Crompton & Knowles Corporation, Worcester, Mass., has acquired Bates Chemical Company, Lansdowne, Pa.

Bates, a manufacturer of certified color chemicals for the food and drug industries, will be expanded through affiliation with the Althouse Chemical Division of Crompton & Knowles.

Association Meetings

Air Pollution International Congress, New York, September 10-11.

American Association of Textile Chemists & Colorists, national convention, Sheraton hotel, Philadelphia, October 6-8.

American Chemical Society, national meeting, New York, September 11-16.

American Council of Independent Laboratories, annual meeting, Deauville hotel, Miami Beach, Fla., October 11-15.

American Institute of Chemical Engineers, May hotel, Tulsa, Okla., September 25-28.

American Oil Chemists' Society, fall meeting, New Yorker hotel, New York, October 17-19.

American Soybean Association, joint annual meeting with National Soybean Processors Association, Peabody hotel, Memphis, Tenn., August 22-23.

American Tung Oil Association, annual convention, Edgewater Gulf hotel, Edgewater Park, Miss., September 28-29.

Armed Forces Chemical Association, annual meeting, Sheraton-Park hotel, Washington, D. C., September 15-16.

Association of Consulting Chemists & Chemical Engineers, annual meeting, Shelburne hotel, New York, October 25.

Chemical Institute of Canada, western regional conference, Regina, Sask., September 8-10.

Chemical Market Research Association, Wentworth - by - the - Sea, Portsmouth, N. H., September 22-23; Pittsburgh Hilton hotel, Pittsburgh, Pa., November 9-10.

Drug, Chemical & Allied Trades Association, annual meeting, Sagamore hotel, Bolton Landing, Lake George, N. Y., September 15-18.

Federation of Societies for Paint Technology, annual meeting, Sherman hotel, Chicago, October 31-November 2.

Gordon Research Conferences: catalysis, Colby Junior College, New London, N. H.; inorganic chemistry, New Hampton School, New Hampton, N. H.; infrared spectroscopy, Kimball Union Academy, Meriden, N. H., August 22-26.

National Agricultural Chemicals Association, annual meeting, Del Coronado hotel, Coronado, Calif., September 27-29.

National Drug Trade Conference, annual meeting, Gramercy Park hotel, New York, December 16.

National Paint, Varnish & Lacquer Association, annual convention, Drake hotel, Chicago, October 27-29.

Parenteral Drug Association, annual convention, Statler hotel, New York, October 19-21.

Pharmaceutical Manufacturers Association, eastern regional meeting, Waldorf-Astoria hotel, New York, December 12-14.

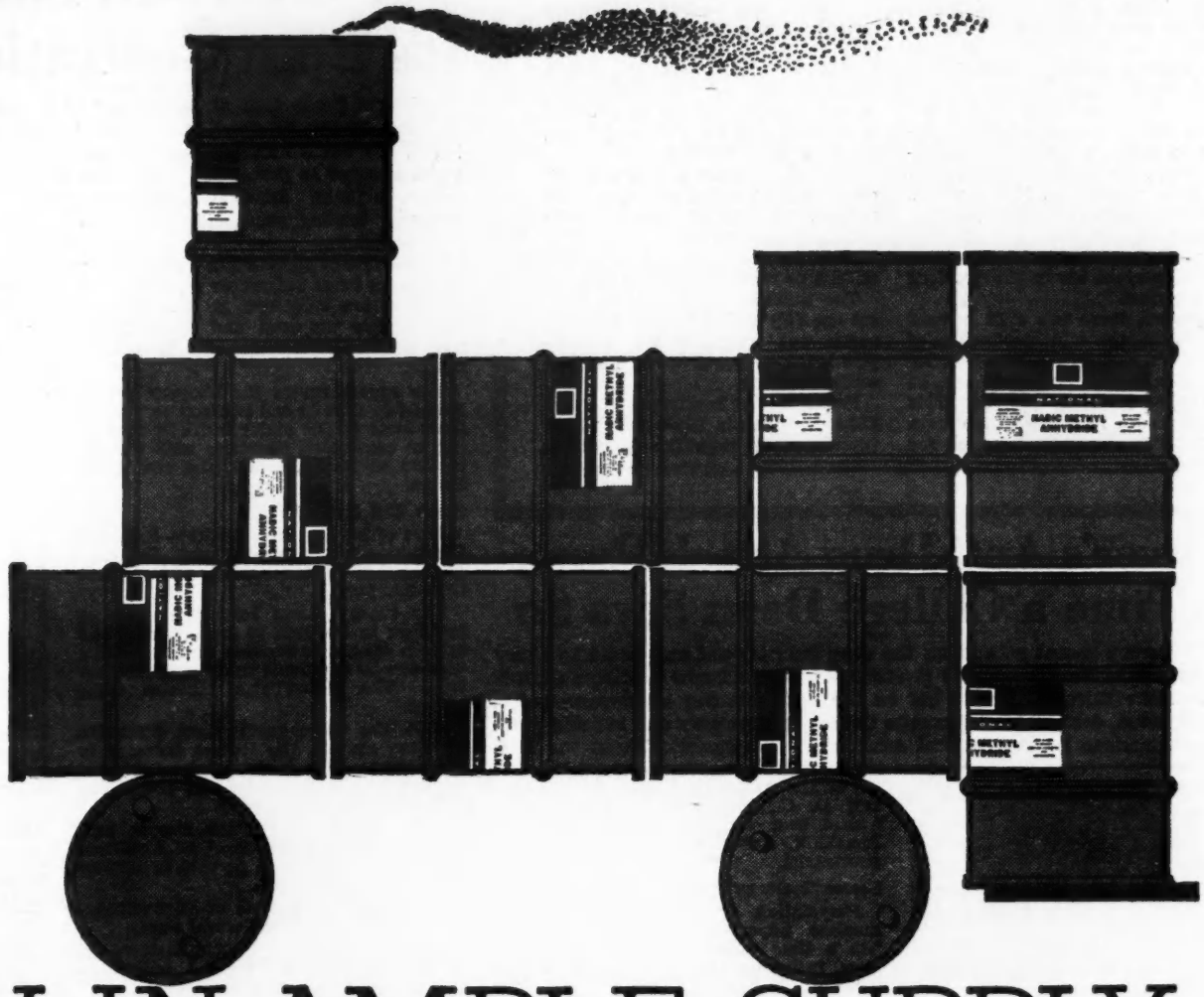
Salesmen's Association of the American Chemical Industry, annual sales clinic, Roosevelt hotel, New York, November 14.

Society of the Plastics Industry, New England section conference, Wentworth-by-the-Sea, Portsmouth, N. H., October 13-14.

Stanford Research Institute, symposium on chemical reactions in the lower and upper atmosphere, Mark Hopkins hotel, San Francisco, April 18-20, 1961.

Synthetic Organic Chemical Manufacturers Association, monthly luncheon meeting, Roosevelt hotel, New York, September 13.

Toilet Goods Association, scientific section's winter meeting, Waldorf-Astoria hotel, New York November 30.



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CHEMICALS AND RELATED MATERIALS

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Current MARKET Quotations

Unless otherwise indicated, listings are first-hand quotations prevailing, according to information and belief, August 19 on large lots, f.o.b. New York, with the lowest in the left-hand column and the highest in the right-hand column. The listings do not represent bid and asked prices nor a range over the week. Differences between high and low may be accounted for by differences in quantity, quality, locality, or individual suppliers' views. An index to the weekly market reports is to be found on page 4.

A

Abies siberica oil, cns. ..... lb. 1.90 - 2.40
Acacia (see Arabic gum).
Acetaldehyde 99%, dms., c.l., works. lb. .12 - —
dms., l.c.l., works ..... lb. .13½- —
tanks, works ..... lb. .10 - —
Acetaldol (see Aldol).
Acetanilide, tech., flaked, bbls., bgs., c.l., frt. alld lb. .32½- —
bbls., bgs., ton lots, frt. alld. lb. .33½- —
bbls., bgs., smaller lots, frt. alld lb. .36½- —
USP, bbls., 225-lb. dms., any quantity lb. .79 - —
100-lb. dms., any quantity lb. .81 - —
Acetic acid, coml., or redist., 28%, bbls. 100 lbs. 4.80 - —
56%, bbls. ..... 100 lbs. 8.25 - —
70%, bbls. ..... 100 lbs. 9.95 - —
80%, bbls. ..... 100 lbs.10.45 - —
Acetic acid, glacial, syn., CP, dms., dlvd. 100 lbs.22.00 -23.00
tech., dms., c.l., dlvd. 100 lbs.13.75 - —
dms., l.c.l., dlvd. 100 lbs.15.25 - —
tanks, dlvd. ..... 100 lbs.10.00 - —
USP, cbys., dlvd ..... 100 lbs.31.00 -32.00
Acetic anhydride, aluminum ret. dms., c.l., dlvd. E. lb. .16½- —
aluminum ret. dms., l.c.l., dlvd. E. lb. .18 - —
tanks, dlvd. E. ..... lb. .14 - —
Acetoacetanilide, fib. dms., c.l., dlvd. lb. .80 - —
fib. dms., l.c.l., dlvd ..... lb. .81 - —
Acetoacet-o-chloroanilide, fib. dms., c.l., dlvd. lb. 1.35 - —
fib. dms., l.c.l., dlvd ..... lb. 1.36 - —
Acetoacet-o-toluidide, fib. dms., c.l., dlvd. lb. .82 - —
fib. dms., l.c.l, dlvd ..... lb. .83 - —
Acetone, CP, dms., c.l., dlvd ... lb. .10½- —
dms., l.c.l., dlvd ..... lb. .12 - —
tanks, dlvd. ..... lb. .08 - —
Acetonitrile, dms., c.l., t.l., dlvd. lb. .35 - —
dms., l.c.l., dlvd ..... lb. .36½- .37
tanks, dlvd. ..... lb. .32 - —
Acetophenetidin, USP, 200-lb. dms., 1,000 lbs., frt. alld. lb. 1.20 - —
100-lb. dms., 1,000 lbs., frt. alld. lb. 1.22 - —
Acetophenone, cns., dms ..... lb. .42 - 1.30
Tech., dms., c.l., works ..... lb. .47 - —
dms., l.c.l., works ..... lb. .47¾- —
tanks, works ..... lb. .45 - —
N-Acetyl-p-aminophenol, dms., t.l. (min. 23,000 lbs.), frt. adjusted lb. 1.24 - —
dms., 5,000-lb. lots, same basis lb. 1.30 - 1.45
dms., smaller lots, same basis lb. 1.35 - 1.63
Acetylene black, imp., bgs., c.l., duty and freight extra lb. .20 - —
cs., l.c.l., ex whse ..... lb. .25½- .31
Acetylene tetrabromide, 16-dm. lots or more, f.o.b. works lb. .53 - —
Acetylsalicylic acid, USP, cryst. (20, 40 mesh), powd. (80 mesh), 250-lb. dms., c.l., pt. of shipt lb. .58¼- —
USP, 10% starch granulation, 12-50 mesh, white, 250-lb. dms., c.l., same basis lb. .58¼- —
(Pink and green granulations 5c. per lb. higher.)
Freight equald, shipt. identical quantity over standard routes, from N.Y., Phila., Midland, Mich., Chicago and St. Louis.
Acetyltributyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .35½- —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .36½- —
tanks, frt. alld. E. of Denver. lb. .33 - —
non-ret. dms., c.l., frt. alld. E. of Denver lb. .39½- —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .40½- —
tanks, frt. alld. E. of Denver lb. .37 - —

ACIDS

Acid quotations are listed individually. For example, prices on Acid, cresylic, may be found in the C's under Cresylic acid.

Aconite root, bls. ..... lb. .50 - .55
Acrolein, tech., dms., c.l., works lb. .36 - —
dms., l.c.l., works ..... lb. .36¾ - —
tanks, works ..... lb. .31 - —
Acrylamide, dms., t.l., f.o.b. works. lb. .58 - —
dms., l.t.l., same basis ..... lb. .60 - —
Acrylic acid, glacial, dms., c.l., t.l., dlvd. lb. .42½- —
dms., l.c.l., l.t.l., dlvd ..... lb. .43½- —
tanks, dlvd. ..... lb. .40 - —
tech., esterification, dms., t.l., f.o.b. shipping point lb. .41½- —
tanks, same basis ..... lb. .39 - —
tech., polymerization, dms., t.l., f.o.b. shipping point lb. .42½- —
tanks, same basis ..... lb. .40 - —
Acrylonitrile, dms., c.l., t.l., frt. equald lb. .26 - —
dms., l.c.l., l.t.l., frt. alld ..... lb. .27 - —
tanks, frt. equald ..... lb. .23 - —

Abies Siberica Oil—Ammonium Bicarbonate

Adeps lanae (see lanolin).
Adipic acid, bgs., c.l., dlvd ..... lb. .32¼- —
bgs., l.c.l., dlvd ..... lb. .33 - —
Agar, USP, Kobe No. 1, strip, bls. lb. 2.65 - 2.75
powd., 30 mesh., fib., dms lb. 2.40 - —
dl-Alanine, dms., 100-lbs. or more, f.o.b. works lb. 5.25 - —
dms., 1-99 lbs., same basis ... lb.10.00 - —
Aldol, 95%, dms., l.c.l., works lb. .28 - —
Aldrin, tech., fib. dms., c.l., t.l. dlvd lb. .99 - —
fib. dms., l.c.l., dlvd ..... lb. 1.04 - —

ALCOHOLS

Alcohol quotations are listed individually. For example, prices on Alcohol, furfuryl, may be found in the F's under Furfuryl alcohol.

Aletris root, bgs ..... lb. 1.50 - 1.73
Algin (see Sodium alginate)
Alizarin (see 1,2-Dihydroxy anthraquinone).
Alkali blue dry, 250-lb. bbls., dlvd. E. of Rockies lb. 2.38 - —
Alkali blue, toner, litho flushed, 125-lb. bbls., same basis, lb. 1.35 - —
Alkali blue prices 1c. higher W. of Rockies.
Allethrin, 90%, dms., frt. alld lb.28.80 -28.90
Soln., 20%, dms., 200-2,000 lb. lots, frt. alld lb. 6.50 - 6.55
2½% dms. frt. alld. ..... lb. .95 - 1.10
Allspice oil (see Pimento oil).
Allyl alcohol, dms., c.l. dlvd. ..... lb. .32½- —
dms., l.c.l., dlvd. ..... lb. .34 - —
tanks, dlvd. ..... lb. .30 - —
Allyl bromide 55-lb. cbys. 5,005 lbs. or more, works lb. 1.47 - —
55-lb. cbys., 1,045 to 4,950 lbs., works lb. 1.52 - —
55-lb. cbys., 55 to 990 lbs. works, lb. 1.57 - —
Allyl chloride, dms., c.l., dlvd. ... lb. .17½- —
dms., l.c.l., dlvd ..... lb. .19 - —
tanks, dlvd ..... lb. .15 - —
Allyl isothiocyanate (see Mustard Oil, syn.).
Almond oil, artif., bitter (see Benzaldehyde)
Almond oil, nat., bitter, f.p.a., bots. lb. 2.75 - 3.45
NF, bots. ..... lb. 3.00 - 3.30
sweet, USP, cns., dms ..... lb. .70 - 1.30

Abbreviations

Used in OPD Market Quotations

alld.	allowed	distr.	distributor	No.	number
amorph.	amorphous	djns.	demijohns	nom.	nominal
AMP	American melting point	dlvd.	delivered	o-	ortho
anhyd.	anhydrous	dms.	drums	ord.	ordinary
AOAC	Association of Official Agricultural Chemists	dom.	domestic	oz.	ounce
		E.	east	p-	para
		e.p.	end point	Pac.	Pacific
		equald.	equalized	pf.	proof
a.p.a.	available phosphoric acid	exp.	expressed	phos.	phosphate
		Ext.	external	photo.	photographic
approx.	approximately	F.	fahrenheit	pkgs.	packages
artif.	artificial	ferment.	fermentation	powd.	powdered
ASTM	American Society for Testing Materials	f.f.a.	free fatty acid	precip.	precipitated
		f.f.c.	free from chlorine	prod.	producer
		fib.	fiber	pt.	point
Atl.	Atlantic	f.o.b.	free on board	pulv.	pulverized
Be.	Baume	f.p.a.	free of prussic acid	purif.	purified
bbls.	barrels			redist.	redistilled
bgs.	bags	frt.	freight	refd.	refined
bls.	bales	gal.	gallon	refy.	refinery
bots.	bottles	gran.	granular	reg.	regular.
b.p.	boiling point	grd.	ground	resub.	resublimed
b.p.l.	bone phosphate of lime	i.&a.	iron and aluminum	ret.	returnable
b.r.	boiling range	i.b.p.	initial boiling point	SD	specially denatured
bxs.	boxes	imp.	imported	s.d.	single distilled
C.	centigrade	incl.	included	S E.	southeast
cbys.	carboys	indust.	industrial	sec.	secondary
CD	completely denatured	kgs.	kegs	secs.	seconds
		l-	laevo	s.g.	specific gravity
c.i.f.	cost, insurance, freight	lacq.	lacquer	shipt.	shipment
		lb.	pound	soln.	solution
cks.	casks	l.c.l.	less carlots	s.u.	standard unit
c.l.	carlots	l.t.l.	less truckload	syn.	synthetic
cns.	cans	liq.	liquid	tanks.	railroad tankcars
coml.	commercial	mfrs.	manufacturers	tech.	technical
conc.	concentrated	m-	meta	tert-	tertiary
CP	chemically pure	m.a.p.	mixed aniline point	t.l.	truckloads
cps.	centipoises	min.	minimum	t.w.	tankwagons
cryst.	crystalline	m.p.	melting point	USP	U. S. Pharmacopoeia
cs.	cases	N-	nitrogen		
ctns.	cartons	n-	normal	vis.	viscosity
cyls.	cylinders	nat.	natural	VM&P	varnish makers & painters
d-	dextro	neut.	neutral		
dbl.	double	NF	National Formulary	W.	west
denat.	denatured	NNR	New and Nonofficial Remedies	whse.	warehouse
dest-dist.	destructively—distilled			w.w.	water-white
dl-	dextro-laevo				
dist.	distilled				

A unit-ton is 2,000 pounds of 1 percent of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the price figure shown gives the price of 2,000 pounds of the material.

Aloe, Cape, cs. ..... lb. .30 - .35
powd., cs. ..... lb. .60 - .65
Curacao, kgs. ..... lb. .60 - .70
powd., kgs. ..... lb. .85 - —
Aloin, USP, bbls., dms., kgs. ... lb. 3.25 - 3.75
Alphanaphthol (see a-Naphthol).
Alphanaphthylamine (see a-Naphthylamine).
Alphanitronaphthalene (see a-Nitronaphthalene).
Alphapicoline (see a-Picoline).
Alphaterpinol (see a-Terpinol).
Alphatocopherol (see a-Tocopherol).
Alum ammonium, gran., bgs., works. 100 lbs. 4.30 - —
Lump, dms., works ..... 100 lbs. 5.05 - —
Powd., dms., works ..... 100 lbs. 5.20 - —
USP, burnt., dms ..... lb. .20 - .21
hydrous, dms. ..... lb. .07¾- .08
Alum potassium, gran., bgs., works. 100 lbs. 4.55 - —
Lump, dms., works ..... 100 lbs. 5.30 - —
Powd., dms., works ..... 100 lbs. 5.45 - —
USP, burnt., dms ..... lb. .20 - .21
USP, hydrous, dms ..... lb. .07¾- .08
Alum, potash-chrome, dms ..... lb. .17 - —
Alumina, calcined, bgs., c.l., works. lb. .05¼- —
bgs., l.c.l., works ..... lb. .05½- .06¼
Aluminum acetate, basic soln., 24%, bbls., l.c.l, works lb. .14 - —
Aluminum chloride, coml., anhyd., dms., c.l., works, frt. equald lb. .16 - —
dms., l.c.l., works ..... lb. .16½- —
cryst., dms., c.l., works 100 lbs.21.00 - —
dms., l.c.l., works ..... 100 lbs.21.50 - —
Soln., 32° cbys., c.l., works .... lb. .0495- —
cbys., l.c.l., works ..... lb. .0570- .1093
tanks, works ..... 100 lbs. 3.95 - —
NF, gran., dms., works ..... lb. .31 - .33
Aluminum fluoride, tech., anhyd., bgs., c.l., works lb. .16¼- —
bgs., l.c.l., works ..... lb. .17¼- .19¼
bulk, c.l., basis 80% ..... lb. .14½- —
Aluminum fluoride in fib. dms. 0.35c per lb. higher.
Aluminum formate, basic soln., containers extra, c.l., works. 100 lbs.11.00 - —
containers extra, l.c.l., works. 100 lbs.11.50 - —
Aluminum hydrate, heavy, bgs., c.l., frt. equald lb. .0365- —
bgs., 20,000-40,000 lb. lots, same basis lb. .039 - —
bgs., 2,000-20,000 lb. lots, same basis lb. .049 - —
bulk, c.l., same basis ..... lb. .03¼- —
Aluminum hydroxide, dried, USP XV, fib. dms., works lb. .82½- —
fib. dms., contract, works lb. .79½- —
Aluminum hydroxide, gel, pharmaceutical, 14-15% Al_2O_3, fib dms., works lb. .22 - —
9-9½% Al_2O_3, fib. dms., works. lb. .19 - —
fib. dms., contract, works lb. .18 - —
Aluminum hydroxide, tech., powd., (see Aluminum hydrate).
Aluminum metal, 99½% + 30-lb. ingots, 10,000-lb. lots, frt. alld lb. .2810- —
50-lb. pigs, 10,000-lb. lots, frt alld. lb. .26 - —
Aluminum oxide, amorphous (see Alumina, calcined).
Aluminum paste, lining, extra-fine, dms. lb. .71 - —
Standard grade, dms ..... lb. .48½- —
Aluminum powder, lining, extra-fine, dms. lb. 1.13 - —
Standard grade, dms ..... lb. .83 - —
Aluminum paste and powder prices are f.o.b. shipping point. Add 1c. per lb. for 100-lb. dm., 1½c. per lb. for 50-lb. dm., 3c. per lb. for 10 lb. can and 5c. to 12c. per lb. for smaller containers. Deduct 1c. per lb. for single shipment of 400 to 1,499 lbs. 2c for 1,500 to 4,999 lbs., 3c. for 5,000 to 29,999 lbs. and 4c. for 30,000 lbs. or more. Where destination is within the continental U. S., a deduction equivalent to the lowest available common carrier transportation rate will be made from seller's invoice on orders of 200 lbs. or more.
Aluminum resinate, precip., 3.4% Al, dms lb. .40¼- —
Aluminum stearate, dibasic, ctns., c.l. lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Monobasic, ctns., c.l. ..... lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Tribasic, ctns., c.l. ..... lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Aluminum sulfate, coml., grd., bgs. c.l., works, frt. equald ton.41.00 - —
bulk, c.l., same basis ..... ton.40.00 - —
lump, bgs., c.l., same basis ..ton.44.00 - —
iron-free, bgs., c.l., works, frt. equald ..100 lbs. 3.80 - —
bgs., l.c.l., works, frt. equald, 100 lbs. 4.30 - 8.30
USP, gran., 400-lb. dm., works. lb. .30 - —
USP, powd., dms., works ..... lb. .27 - —
Aluminum sulfate prices $1 per ton higher in the South.
Aluminum trihydrate, heavy (see Aluminum hydrate, heavy).
Ambergris, gray, bots ..... oz. 6.50 -10.00
P-Aminoacetanilide, tech., paste, dms., frt. alld lb. 1.57 - —
Aminoacetic acid, NF, bbls., frt. adjusted lb. 1.35 - 1.60
Aminoazotoluene base, bbls., 100% basis lb. 1.03 - 1.18
p-Aminobenzoic acid, tech., dry, dms., works lb. 1.72 - —
2-Amino-4-chlorophenol, tech., solid, dms., frt. alld lb. 8.10 - —
p-Aminodiphenylamine, tech., solid, dms., frt. alld lb. 3.00 - —
Aminoethyl ethanolamine, dms., c.l., dlvd lb. .475 - —
dms., l.c.l., dlvd ..... lb. .49 - —
tanks, dlvd. ..... lb. .45 - —
2-Amino-2-methyl-1-propanol, dms., c.l., frt. alld lb. .44 - —
dms., l.c.l., frt. alld ..... lb. .45 - —
tanks, frt. alld. ..... lb. .42 - —
m-Aminophenol, dist., dms., ton lots. lb. 2.05 - —
dms., smaller lots. ..... lbs. 2.50 - —
p-Aminophenol, dms., frt. alld. lb. 1.15 - —
Aminophylline, USP, 100-lb. dm., frt. alld lb. 3.25 - —
p-Aminosalicylic acid, dms., 100 lbs. or more, frt. adjusted lb. 3.40 - —
Ammonia, anhyd., fertilizer, tanks, works, frt. equald, E. of Rockies ..ton.84.00 - —
refrigeration, tanks, works, frt. equald, E. of Rockies ..ton.90.50 - —
Aqueous, 29.4%, tanks, works, anhyd. basis, E. of Rockies. ton.91.00 - —
Ammoniacal liquor (see Ammonia, aqueous).
Ammoniac, sal., gray, bgs., c.l., works, frt. equald ..100 lbs. 8.25 - —
bgs., l.c.l., same basis ..100 lbs. 8.65 -12.65
Ammoniac, sal., white (see Ammonium chloride, tech.)
Ammonium acetate, purif., dms lb. .40 - —
Ammonium benzoate, USP, fib. dms. ton lots, works lb. 1.00 - —
fib dms. 1,000-lb. lots, works. lb. 1.05 - —
Ammonium biborate, gran., dms., c.l., works ton.325 - —
dms., ton lots, ex whse. 100 lbs.20.40 - —
dms., smaller lots, ex whse. 100 lbs.21.15 - —
Ammonium bicarbonate, dom., dms., c.l., works ..100 lbs. 7.00 - —
dms., l.c.l., works ..... 100 lbs. 9.00 - —

Ammonium bichromate, dms., works lb. .42 - .43
Ammonium bifluoride, dms., dlvd lb. .2145- .2245
Ammonium bromide, NF, gran., dms., c.l., t.l., frt. equald lb. .44 - —
dms., l.c.l., same basis lb. .46 - —
Ammonium carbonate, USP, lump, dms., c.l lb. .15½- —
Ammonium chloride, white, tech., fine gran., bgs., c.l., works. 100 lbs. 6.00 - —
bgs., l.c.l., works 100 lbs. 8.00 - 8.45
USP, gran., 250-lb. dm lb. .17¼- —
Ammonium citrate, dibasic, 250-lb. dm, f.o.b. works lb. .77 - —
Ammonium dichromate (see Ammonium bichromate)
Ammonium fluoride (see Ammonium bifluoride)
Ammonium gluconate, tech., 200-lb. dm., f.o.b. works E lb. .45 - —
Ammonium hydroxide (see Ammonia aqeous).
Ammonium iodide, NF, 25-lb. jar, f.o.b. works lb. 4.26 - —
Ammonium lauryl sulfate, dms., c.l., frt. alld lb. .20½- —
dms., t.t.l., frt. alld lb .21½- —
tanks, frt. alld lb. .19½- —
Ammonium lignin sulfonate, bgs., c.l., works 100 lbs. 3.25 - —
bgs., l.c.l., works 100 lbs. 3.40 - 3.65
Ammonium linoleate, 80%, dms., works lb. .50 - .55
Ammonium molybdate, CP, cryst., 400 lb dms., 15,000-lbs. works. lb 1.22 - —
400-lb dms., 2,000-lb. contracts, works lb. 1.23 - —
400-lb. dms., works lb. 1.24 - —
Ammonium nitrate, dom., fertilizer grade, 33.5% N, bgs., f.o.b. works ton.64.00 - —
with dolomite, 20.5% N, bgs., c.l., Hopewell, Va ton.48.00 - —
Imp., Canadian, 33.5% N, eastern, bgs., c.l., ship't point, frt. equald to $3 ton base price ton.64.00 - —
Ammonium oxalate, tech., fine gran., 250-lb. dm., f.o.b. works E lb. .28½- —
Tech., powd., 200-lb. dm., same basis lb. .28½- —
Ammonium pentaborate, gran., bgs., c.l., works ton.193.00 - —
bgs., ton lots, ex whse 100 lbs.14.23 - —
bgs., smaller lots, ex whse. 100 lbs.15.48 -17.48
Ammonium pentaborate powder $10 per ton higher in bags.
Ammonium persulfate, tech., dms., 10-ton lots or more, works lb. .18 - —
dms., smaller lots, works lb. .20 - .23
Ammonium phosphate, coml., bgs., c.l., works, frt. equald lb. .09¼- —
bgs., l.c.l., same basis lb. .10 - —
Dibasic, NF, V. bbls., dms lb. .46 - —
Dibasic, tech., bgs., c.l., works, frt. alld lb. .09¼- —
Ammonium silicofluoride, dms., works lb. .12¼- .13¼
Ammonium sulfamate, bgs., c.l., t.l., works lb. .19 - —
bgs., l.c.l., works lb. .20½- .27
Ammonium sulfate, standard granular, bulk, f.o.b. works, base price ton.32.00 - —
Ammonium sulfate, standard, gran., purif., c.l., 100-lb. bgs., f.o.b. works lb. .08½- —
Large granular, bulk, c.l., works. ton.35.00 - —
bgs., c.l., works ton.40.00 - —
Tech., bulk, c.l., t.l., works ton.52.00 - —
bgs., c.l., t.l., works ton.56.00 - —
bgs., l.c.l., l.t.l., works 100 lbs. 3.20 - 5.20
Ammonium sulfide, liq., 40-44%, tanks, frt. equald., 100% basis. ton.160.00 - —
Ammonium sulfocyanide, tech. (see Ammonium thiocyanate).
Ammonium thiocyanate, tech., cryst., dms., c.l., works lb. .20 - —
dms., l.c.l., works lb. .22 .26
Tech, soln., 50%, tanks, frt. equald., basis ammonium thiocyanate content lb. .17¼- —
Ammonium thioglycolate, coml., 55-gal. dms., ton lots, 100% basis lb. 1.15 - —
d-Amphetamine hydrochloride, monobasic, dms lb.17.50 -23.50
dl-Amphetamine hydrochloride, dibasic, dms lb. 4.50 - 6.00
d-Amphetamine phosphate, fib. dms., 100-lb. lots lb.15.00 - —
dl-Amphetamine phosphate, dms.lb. 4.20 - 5.60
d-Amphetamine sulfate, fib. dms. lb.15.00 -17.00
dl-Amphetamine sulfate, fib. dms., lb. 4.20 - 5.60
Amyl acetate, ex fusel oil, tech., dist., from 125° to 150°C., dms., c.l., frt. alld. E. of Rockies lb. .18½- .19
dms., l.c.l., same basis lb. .20 - .20½
tanks, same basis lb. .16 - .16¼
Amyl acetate, ex pentane, reg., dms., c.l., dlvd lb. .19 - —
dms., l.c.l., dlvd. lb. .21½- —
tanks, dlvd. lb. .16½- —
tech., dms., c.l., dlvd. lb. .17 - —
dms., l.c.l., dlvd. lb. .18½- —
tanks, dlvd. lb. .14½- —
Amyl acetate, syn., oxo process, dms., c.l., dlvd lb. .19 - —
dms., c.l., dlvd. lb. .20½- —
tanks, dlvd. lb. .16½- —
Amyl alcohol, ex fusel oil (see Fusel oil refd.).
Amyl alcohol, ferment, refd., 128°-132°C., dms., l.c.l., dlvd lb. .43½- —
refd., ACS grade, dms., l.c.l., dlvd lb. .45½- —
ex pentane, mixed amyls, dms., c.l., frt. alld lb. .19 - —
dms., l.c.l., frt. alld lb. .20½- —
tanks, frt. alld. lb. .16½- —
Amyl alcohol, primary, dms., c.l., frt. alld lb. .20¼- —
dms., l.c.l., frt. alld lb. .21¾- —
tanks, frt. alld lb. .17¾- —
Sec-synthetic, dms., c.l., works, frt. alld lb. .19 - —
dms., l.c.l., same basis lb. .20½- —
tanks, same basis lb. .17 - —
Tert-synthetic, dms., c.l., frt. alld. E lb. .17 - —
dms., l.c.l., frt. alld. E lb. .18½- —
tanks, frt. alld. E. lb. .14½- —
Amyl alcohol, 1-pentanol (syn. normal), dms., c.l., works lb. .41½- —
dms., l.c.l., works lb. .43 - —
tanks, works lb. .39½- —
2-pentanol, dms., c.l., works lb. .65 - —
dms., l.c.l., works lb. .70 - —
tanks, works lb. .60 - —
Amyl n-butyrate, dms. lb. 1.00 - 1.25
Amyl cinnamic aldehyde, dms lb. 1.70 - 2.20
p-tert Amyl phenol, dms., c.l., works. lb. .26¾- —
dms., l.c.l., works lb. .27¾- —
Amyl salicylate, cns., dms. lb. .71 - —
Amyris oil, dms. lb. 1.55 - —
Anethol, tech., dms. lb. .80 - .92
USP, cns., dms. lb. 1.05 - —
Angelica root, bls lb. .85 - .90
Angelica root oil, bots lb.120.00 -140.00
Angelica seed oil, bots lb.120.00 -130.00
Aniline dms., c.l., frt. alld lb. .20 - —
dms., l.c.l., frt. alld. lb. .21 - —
tanks, frt. alld. lb. .18 - —
Aniline oil (see Aniline).
Aniline salt, dms., c.l., t.l., 20,000 lbs. min., frt. alld lb. .33 - —
dms., l.c.l., same basis lb. .35 - —
Anise oil, USP, dms. lb. 1.75 - 3.00
Anise seed, Mexican, bgs. lb. .16 - —
Spanish, bgs. lb. .16½- —
Anisic aldehyde, dms lb. 1.50 - 2.20
o-Anisidine, dms., c.l., frt. alld lb. .80 - —
dms., l.c.l., same basis lb. .82 - —
tanks, same basis lb. .78 - —
p-Anisidine, dms., works lb. .97 - —
Anthracene, 90-95%, dms., c.l., t.l. f.o.b., works lb. .42½- —
dms., l.c.l., minimum shipment 1,000 lbs., same basis lb. .45 - —
Anthranilic acid, 99%, 150-lb. dms., dlvd lb. 1.15 - —
Anthraquinone, 99.5%, bbls., c.l., frt alld lb. .83 - —
bbls., l.c.l., same basis lb. .86 - —
Electrical grade, bbls., l.c.l., same basis lb. 1.10 - —
Antimony butter (see Antimony trichloride).
Antimony metal, bulk, c.l., mines. lb. .29 - —
cs., c.l., mines lb. .29½- —
Antimony oxide, bgs., c.l., frt. alld. lb. .26½- —
bgs., l.c.l., frt. alld. lb. .28 - —
Prices of antimony oxide are 2% higher west of the Rockies.
Antimony sulfide, approx. 65%, bgs., 10,000-lb. lots, dlvd. lb. .23 - —
bgs., smaller lots, dlvd lb. .24 - .26
Antimony trichloride, anhyd., solid, pails, c.l., works lb. .41 - —
pails, l.c.l., works lb. .43 - —
Antimony-potassium tartrate, tech., powd., 250-lb., dm., f.o.b. works, E lb. .69½- —
USP, powd., 250-lb. dm., same basis lb. .74½- —
Apomorphine hydrochloride, USP, bots., 25-oz. lots oz.35.60 - —
Apricot kernel oil, USP, dms lb. .55 - .70
Arabic gum, amber sorts, 10 bgs. lb. .27 - —
USP, powd., bbls. lb. .31 - .34
Areca nuts, powd., bbls. lb. .13 - —
Arecoline hydrobromide, NF, bots., tins, 100 oz. or more oz. 4.00 - —
l-Arginine, free base, dms., 10-kilo lots or more kilo.90.00 - —
l-Arginine glutamate, dms., 10-kilo lots or more kilo.60.00 - —
l-Arginine monohydrochloride, dms., 10-kilo lots or more kilo.60.00 - —
Arnica flowers (true Montana), bls. lb. .75 - —
Aromatic petroleum solvents (see Solvent Naphtha, petroleum, aromatic).
Arsenic, crude (95%), bulk, c.l., works lb. .016 - —
bbls., c.l., works lb. .031 - —
Arsenic trioxide, NF, powd., dms., 300-lbs., f.o.b. works lb. .48 - —
Arsenic, white, powd., bbls., c.l., works lb. .04½- —
bbls., l.c.l., works lb. .06½- .07½
Arsenous acid, tech. (see Arsenic, white).
Arsenous acid, USP (see Arsenic trioxide).
Arylid maroons, deep shades, bbls. lb. 3.70 - —
Light shades, bbls. lb. 2.85 - —
Asafetida gum, cns lb. .36 - .40
Powd., bbls., dms lb. .75 - .80
Asbestine (see Talc, fibrous, New York).
Asbestos, Canadian crude
6D, c.l. (30 tons), mines ton.86.00 - —
7D, c.l. (30 tons), mines ton.75.00 - —
7F, c.l. (30 tons), mines ton.71.00 - —
7H, c.l. (30 tons), mines ton.61.00 - —
7K, c.l. (30 tons), mines ton.50.00 - —
7M, c.l. (30 tons), mines ton.44.00 - —
7R, c.l. (30 tons), mines ton.43.00 - —
7RF, c.l. (30 tons), mines ton.44.00 - —
7T, c.l. (30 tons), mines ton.41.00 - —
7TF, c.l. (30 tons), mines ton.44.00 - —
Asbestos prices are in Canadian funds; l.c.l. lots $4 per ton higher.
Ascorbic acid, USP, dms., 100-kilos. kilo. 7.35 - —
dms., less than 100-kilos kilo.7.75 - —
Ash, black (see Barium sulfide).
Asphalt, gilsonite, black jet, bgs., c.l., mines ton.43.50 - —
ex-whse, 5 tons or more, N. Y., N. J ton.89.50 - —
select, brilliant black, 340°-360°F. fusing pt., bgs., c.l., mines. ton.46.00 - —
270°-295°F. fusing pt., bgs., c.l., mines ton.43.00 - —
Asphalt, petroleum, cut-back, tanks, tankwagon, refy gal. .09½- —
emulsion, tanks, tankwagon, refy. gal. .09½- —
steam-refd., 50-80 penetration, tanks, tankwagon, refy. ton.21.00 - —
85-300 penetration, tanks, tankwagon, refy ton.20.00 - —
Aspirin (see Acetylsalicylic Acid).
Atropine, NF, tins oz. 5.75 - 7.50
Atropine sulfate USP, bots oz. 5.25 - 5.75
Azelaic acid, bgs., c.l., dlvd. lb. .40 - —
bgs., ton lots, same basis lb. .41 - —

B

Bacitracin, bulk, 1,000,000,000 or more units 50,000 units. .65 - —
less than 1,000,000,000 units. 50,000 units. .70 - —
Balm of Gilead buds, dried, bgs. lb. 1.25 - 1.35
Barberry root bark, bgs lb. 1.00 - 1.10
Barbital, NF, 100-lb. dms., f.o.b. works lb. 4.50 - —
Barbital sodium, NF, 100-lb. dms. lb. 4.75 - —
Barium carbonate, precip., bgs., c.l., works ton.111.50 - —
bgs., smaller lots, works ton.126.50 - —
Barium chlorate, dms., works lb. .32 - .41
Barium chloride, anhyd., bgs., c.l., works ton.176.00 - —
bgs., l.c.l., works ton.196.00 - —
NF, cryst., dms., 400-lbs., works lb. .23 - —
Tech., cryst., bgs., c.l., works. 100 lbs. 7.00 - —
bgs., l.c.l., works 100 lbs. 8.00 - —
Barium chromate, bgs., frt. equald. lb. .38 - —
Barium dioxide (see Barium peroxide).
Barium hydrate, cryst., bgs., c.l., t.l., frt. equald ton.208.00 - —
bgs., l.c.l., l.t.l., frt. equald ton.218.00 - —
Barium monohydrate, 99%, bgs., c.l., frt. equald 100 lbs.11.25 - —
bgs., l.c.l., frt. equald 100 lbs.11.75 - —
Barium monoxide (see Barium oxide).
Barium nitrate, bbls., c.l., t.l., dlvd. lb. .16 - —
bbls., l.c.l., l.t.l., dlvd. lb. .17 - —
Barium oxide, grd., dms., c.l., t.l., frt equald ton275.00 - —
dms., l.c.l., l.t.l., frt. equald ton.285.00 - —
Barium peroxide, dms., frt. equald. lb .20 - —
Barium stearate, ctns., c.l., frt. alld. lb. .41 - —
ctns., l.c.l. same basis lb. .42 - .46
Barium sulfate, tech. (see Barytes and blanc fixe).
Barium sulfate, X-ray, 100-lb. dm. lb. .19½- —
Barium sulfide, dms., c.l., works. ton.100.00 - —
dms., l.c.l., works ton.110.00 - —
Barytes, southern, off-color, bgs., mines ton.30.00 - —
95-75%, bgs., mines ton.30.00 - —
white, water-grd., paper bgs., c.l., St. Louis ton.60.00 -60.25
paper bgs., ex whse., New York ton.84.85 - —
Battery acid, cbys., c.l., works E. 100 lbs. 2.35 - —
cbys, l.c.l., works, E 100 lbs. 2.65 -10.95
Bauxite, bulk, mines ton. 7.00 -10.00
Bay oil, NF, Puerto Rican, 50-55%, cns lb. 2.40 - 2.70
55-60%, cns. lb. 2.55 - —
NF, West Indian, 50-55%, cns. dms lb. 2.50 - —
Bayberry wax, bgs lb. .65 - .70
Beeswax, crude, African bgs. lb. .50 - .52
Brazilian, bgs. lb. .55 - .56
Central American, bgs lb. .53 - —
Chilean, bgs. lb. .56 - —
Refd., USP, bleached white, bricks, 100-lb. ctns lb. .69 - .71
white, slabs, 100-lb. ctns lb. .68 - .70
yellow, bricks, 100-lb. ctns lb. .59 - .61
yellow, slabs, 100-lb. ctns lb. .58 - .60
Belladonna leaf, bls. lb. .24 - .26
Belladonna root, bls. lb. .28 - .35
Bentonite, dom. 200 mesh, bgs., c.l., mines ton.14.00 - —
Imp. Italian, white, high gel., bgs., 5-ton lots, ex whse ton.95.20 - —
bgs., 1-ton lots, ex whse ton.99.00 - —
Imp. Italian, white, low gel., bgs., 5-ton lots, ex whse ton.93.40 - —
bgs., 1-ton lots, ex whse ton.97.16 - —
Benzal chloride, cbys., works lb. .44 - —
Benzaldehyde, NF, dms lb. .80 - 1.05
Tech., dms., c.l., t.l. lb. .47 - —
dms., l.c.l. lb. .48 - —
Benzene, pure or nitration, tanks, works:
Bethlehem, Pa gal. .34 - —
Birmingham district gal. .34 - —
Chicago district gal. .34 - —
Cleveland district gal. .34 - —
Geneva, Utah gal. .34 - —
Houston, Tex. gal. .34 - .40
Johnstown, Pa gal. .34 - —
Benzene, pure or nitration, tanks, works:
Lackawanna, N. Y. gal. .34 - —
Lone Star, Tex gal. .34 - —
Lorain, Ohio gal. .34 - —
Middletown, Ohio gal. .34 - —
Mennequa, Colo. gal. .34 - —
Philadelphia district gal. .34 - —
Pittsburgh district gal. .34 - —
Sparrows Point, Md. gal. .34 - —
Syracuse, N. Y. gal. .34 - —
Terre Haute, Ind gal. .34 - —
Youngstown, Ohio gal. .34 - —
Benzene hexachloride, 25% and 99% gamma isomer (see Lindane).
Benzene hexachloride, tech., high gamma, bgs., c.l., t.l., consignment, dlvd. gamma-unit. .0075 —
bgs., c.l., t.l., direct sale, f.o.b. works gamma-unit. .0065- —
Tech., low gamma, bgs., c.l., t.l., consignment, dlvd. gamma-unit. .0075- —
bgs., c.l., t.l., direct sale, f.o.b. works gamma-unit. .0056- —
Benzidine hydrochloride, bbls., c.l., frt. alld., 100% basis lb. 1.19 - —
bbls., l.c.l., same basis lb. 1.21 - —
Benzidine sulfate, tech., bbls., frt. alld., 100% basis lb. 1.21 - —
Benzidine yellow, AAA, bbls., dlvd. lb. 2.20 - —
AAOT, bbls., dlvd. lb. 2.55 - —
Lightfast, bbls., dlvd. lb. 3.40 - —
Benzocaine, dms., 100-lbs., frt. alld. lb. 3.25 - —
Benzoic acid, tech., dms., c.l., t.l., frt. alld lb. .25 - .37
dms., l.t.l., same basis lb. .29 - .41
tanks, same basis lb. .21 - —
USP, bbls., dms., ton lots lb. .48 - —
bbls., dms., 1,000-lb lots lb. .50 - —

BENZOL

Benzol quotations, both coaltar and petroleum, may be found under Benzene.

Benzoin gum, Sumatra, cs. lb. .32 - —
Benzophenone, dms. lb. 1.40 - 1.65
Benzotriazole, tech., dms., 1,000-lb. lots, works lb. 2.25 - —
Benzotrichloride, cbys., 1,000-lb. lots or more, frt. equald lb. .21 - —
cbys., smaller lots, frt. equald lb. .23 - —
Benzoyl chloride, cbys., dms., c.l., works, frt. equald lb. .22 - —
cbys., l.c.l., same basis lb. .23 - —
tanktrucks, dlvd. Metropolitan area lb. .21 - —
Benzoyl peroxide, purif., fib. dms., 50 to 1,000-lb lots, works lb. .98 - 1.08
Benzyl acetate, f.f.c., cns., dms lb. .54 - —
Benzyl alcohol, NF, dms. lb. .54 - —
Tech., dms., dlvd. lb. .47½- .65
Benzyl benzoate, USP, 40-lb. dms lb. .64 - —
Benzyl chloride, tech., cbys., dms., c.l., works, frt. equald lb. .22½- .25½
cbys., dms., l.c.l., same basis lb. .23½- .25½
tanktrucks, dlvd. Metropolitan area lb. .21 - —

A 2½c. differential is quoted on benzyl chloride in 5-gal. cbys. In steel dms. prices are ½c. lower.

Benzyl cinnamate, cns. lb. 3.30 - 3.60
N-Benzyl-N,N-dimethylamine, 50 dms., frt. alld lb. 1.25 - —
12-49 dms., same basis lb. 1.35 - —
1-11 dms., same basis lb. 1.90 - —
Benzyl formate, cns. lb. 1.85 - 2.10
Benzyl isoeugenol, cns lb. 9.25 - —
Benzyl propionate, bots. lb. 1.35 - 1.65
Benzyl salicylate, bots lb. 1.50 - 1.85
Benzylidine acetone, bots. lb. 1.75 - 1.80
Benzylidine chloride (see Benzal chloride).
Berberine bisulfate, cns lb.56.50 - —
Berberine hydrochloride, bots lb.56.50 - —
Bergamot oil, nat., NF, Italian, ens. lb.11.00 -12.00
Betagammapicoline (see b,g-Picoline).
Betahydroxynaphthoic acid (see b-Oxynaphthoic acid).
Betamethyinapthaiene (see Methylnaphthalene).
Betanaphthol (see b-Naphthol).
Betanaphthylamine (see b-Naphthylamine).
Betaoxynaphthoic acid (see b-Oxynaphthoic acid).
Betaphenylethylamine (see b-Phenylethylamine).
BHC (see Benzene hexachloride, tech.).
Biotin, cryst., bots gram.10.00 - —
Biphenyl (see Diphenyl).
Birchtar oil, crude, cns lb. 1.50 - 1.90
Rectified, cns. lb. 1.75 - 2.00
Bismuth chloride, jars lb. 5.11 - —
Bismuth hydroxide, dms lb. 4.60 - 4.65
Bismuth metal bxs., ton lots lb. 2.25 - —
Bismuth nitrate, cryst., 250-lb. dm. lb. 2.25 - —
Bismuth oxychloride, 25-lb. dm., f.o.b. works lb. 4.42 - —
Bismuth subcarbonate, USP, 150-lb. dm lb. 3.70 - —
Bismuth subgallate, NF, 200-lb. dm., f.o.b. works lb. 4.43 - —
Bismuth subiodide, fib dms lb. 5.37 - —
Bismuth subnitrate, NF, 200-lb. dm., f.o.b. works lb. 3.15 - —
Bismuth subsalicylate, USP, 100-lb. dm., f.o.b. works lb. 4.25 - —
Bismuth trioxide, 100-lb. dms., f.o.b. works lb. 4.40 - —
Bismuth-ammonium citrate, USP, powd., jars lb. 4.22 - —
Bisphenol-A bgs., c.l., t.l., single shipt., 70,000-lbs. or more, frt. alld lb. .29½- —
bgs., c.l., t.l., less than 70,000 lbs., same basis lb. .30 - —
bgs., l.c.l., same basis lb. .31 - —
Blackberry root bark, ols lb. .50 - .55

BLACK PIGMENTS

Black pigment quotations are listed individually. For example, prices on Black, acetylene, may be found in the A's under Acetylene black.

Blanc fixe, direct process, bgs., c.l., works ton.160.00 - —
bgs., l.c.l., works ton.170.00 - —
bgs., l.c.l., New York whse ton.200.00 - —
Blood, dried, 16-16½% ammonia, bgs., New York unit-ton. 5.50 - —
Bloodroot, bls. lb. .75 - .80

BLUE PIGMENTS

Blue pigment quotations are listed individually. For example, prices on Blue, ultramarine, may be found in the U's under Ultramarine blue.

Blue dyes (see Dyes).
Blue vitriol (see Copper sulfate)
Bois de rose oil, Brazilian, dms lb. 2.10 - —
Peruvian, dms. lb. 1.70 - —
BON acid maroons, pure, bbls lb. 1.75 - —
Resinated, bbls. lb. 1.50 - —
Bone black, dms., c.l., frt. alld lb. .1750- .2225
l.c.l., works lb. .1950- .2425
Pacific coast bone black prices 3¼c. per lb. higher.
Bonemeal, steamed, works, E ton.80.00 - —
Bone phosphate, defluorinated ot lime (see Defluorinated phosphate).
Bone phosphate, precip. (see Calcium phosphate, tribasic).
Borax, tech., anhyd., 99½%, bgs., c.l., works ton.92.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 7.42 - —
bgs., smaller lots, same basis 100 lbs. 8.67 -10.67
bulk, c.l., works ton.83.00 - —
Borax, tech., gran., decahydrate, 99½%, bgs., c.l., works. ton.50.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 5.32 - —
bgs., smaller lots, same basis. 100 lbs. 6.57 - 8.57
bulk, c.l., works ton.43.50 - —
pentahydrate, 99½%, bgs., c.l., works ton.64.50 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 6.05 - —
bgs., smaller lots, same basis 100 lbs. 7.30 - 9.30
bulk, c.l., works ton.58.00 - —
USP, powd., bgs., c.l., works. ton.54.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 6.45 - —
bgs., smaller lots, same basis. 100 lbs. 7.70 - 9.70
Bordeaux powder, tribasic, bgs., c.l., dlvd lb. .24 - —
bgs., l.c.l., same basis lb. .26 - —
Boric acid, tech., anhyd., 99.9%, bgs., c.l., works ton.335.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs.19.62 - —
bgs., smaller lots, same basis. 100 lbs.20.87 -22.87
cryst., 99.9%, bgs., c.l., works. ton.163.50 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs.11.05 - —
bgs., smaller lots, same basis. 100 lbs.12.30 -14.30
Boric acid, tech., cryst., 99.9%, dms., c.l., works ton.188.50 - —
dms., ton lots, ex whse., New York or Chicago. 100 lbs.12.30 - —
bgs., smaller lots, same basis 100 lbs.13.05 - —
gran., 99.9%, bgs., c.l., works. ton.112.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 8.47 - —
bgs., smaller lots, same basis. ton.174.25 - —
dms., c.l., works ton.137.00 - —
dms., ton lots, ex whse, New York or Chicago 100 lbs. 9.72 - —
dms., smaller lots, same basis 100 lbs.10.47 - —
bulk, c.l., works ton.106.00 - —
powd., bgs., ton lots, ex whse., New York or Chicago. 100 lbs. 8.85 - —
bgs., smaller lots, same basis 100 lbs.10.10 -12.10
Boric acid, powd., dms., smaller lots, same basis 100 lbs.11.45 - —
USP boric acid $25 per ton higher in bags.
Borneol, cns. lb. 2.75 - —
Boron trichloride, CP, 1,800-lb. cyls., works lb. 1.25 - —
100-lb. cyls., works lb. 1.70 - —
Boron trifluoride, gas, cyls., t.l., works lb. .70 - —
cyls., l.t.l., works lb. .70 - —
Brimstone (see Sulfur).
Broenner's acid, bbls lb. 1.53 - —
Bromine, purif., cs., c.l., t.l., dlvd. E. of Rockies lb. .32 - —
cs., l.c.l., same basis lb. .34 - .39
ref. dms., c.l., t.l., dlvd. E. of Rockies lb. .31 - —
ref. dms., l.c.l., same basis lb. .31 - .34
tanks, same basis lb. .21½- —

Bromochloromethane, dms., c.l., frt. equald.	lb.	.48	- —
dms., l.c.l., same basis	lb.	.50	- —
tanks, same basis	lb.	.47	- —
Bromoform, pharmaceutical grade, 100-lb. cbys.	lb.	1.80	- 1.90
Bromstyrol, bots.	lb.	5.35	- 5.70
Brucine, cns	oz.	Nominal.	
Brucine sulfate, NF, cns.		1.45	- 1.75
Buchu leaves, bbls.	lb.	.70	- .75

BROWN PIGMENTS

Brown pigment quotations are listed individually. For example, prices on Brown, Iron oxide, may be found in the l's under Iron oxide brown.

Butadiene, refd. cyls., c.l., refy.	lb.	.21	- —
cyls., l.c.l., refy.	lb.	.22	- —
tanks, dlvd.	lb.	.14½	- —
Butene-1, tanks, works	lb.	.0625	- —
Butene-2, tanks, works	lb.	.0570	- —
n-Butyl acetate, ferment, dms., c.l., frt. alld.	lb.	.17	- —
dms., l.c.l., same basis	lb.	.18½	- —
tanks, same basis	lb.	.14½	- —
Syn., dms., c.l., dlvd. E.	lb.	.17	- —
dms., l.c.l., same basis	lb.	.18½	- —
tanks, same basis	lb.	.14½	- —
sec-Butyl acetate, syn., dms., c.l., dlvd. E.	lb.	.13¾	- —
dms., l.c.l., same basis	lb.	.16¼	- —
tanks, same basis	lb.	.12¼	- —
n-Butyl acrylate, dms., c.l. or t.l., straight or mixed frt. alld. E	lb.	.42½	- —
dms., l.t.l. same basis	lb.	.43½	- —
tanks, same basis	lb.	.40	- —

Prices of n-Butyl acrylate are 1c. per lb. higher in Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.

n-Butyl alcohol, ferment, dms., c.l., frt. alld.	lb.	.18	- —
dms., l.c.l., frt. alld.	lb.	.19½	- —
tanks, frt., alld.	lb.	.15½	- —
n-Butyl alcohol, syn., dms., c.l., dlvd.	lb.	.18	- —
dms., l.c.l., frt. alld	lb.	.19½	- —
tanks, dlvd.	lb.	.15½	- —
Sec-synthetic, dms., c.l., dlvd	lb.	.15	- —
dms., l.c.l., dlvd.	lb.	.16½	- —
tanks, dlvd.	lb.	.12½	- —
n-Butyl alcohol, tert-synthetic, dms., c.l., frt. alld., dlvd E.	lb.	.16	- —
dms., l.c.l., same basis	lb.	.17½	- —
tanks, same basis	lb.	.13½	- —
Butyl aldehyde (see Butyraldehyde).			
Butyl chloride, dms., c.l., works	lb.	.37½	- —
dms., l.c.l., works	lb.	.38¼	- —
n-Butyl ether, dms., c.l., works	lb.	.35¼	- —
dms., l.c.l., works	lb.	.36	- —
tanks, works	lb.	.33¼	- —
Butyl lactate, dms., c.l., frt. alld. E. Rockies	lb.	.42½	- —
dms., l.c.l., same basis	lb.	.43½	- —
tanks, same basis	lb.	.40	- —
Butyl laurate, dms., works	lb.	.37½	- —
Butyl methacrylate, dms., c.l., t.l., works	lb.	.55	- —
dms., l.c.l., works	lb.	.55½	- —
Butyl oleate, refd., dms., l.c.l., works	lb.	.32	- —
Butyl phenylacetate, dms.	lb.	4.50	- 4.60
Butyl phthalate (see Dibutyl phthalate).			
Butyl stearate, dms., c.l., frt. alld. E. of Mississippi	lb.	.27¼	- —
dms., l.c.l., same basis	lb.	.28¼	- —
Butylamine (see Mono-, Di- and Tri-butylamine).			
tert-Butylamine, dms., c.l., t.l., f.o.b. works	lb.	.47	- —
dms., l.c.l., same basis	lb.	.47½	- —
tc., t.l., same basis	lb.	.45	- —
Butylated hydroxyanisole, food grade, dms., dlvd.	lb.	4.75	- —
6-tert-Butyl-m-cresol (see Mono-tert-butyl-m-cresol).			
Butylated hydroxytoluene (see 2,6-Di-tert-butyl-p-cresol).			
1,3-Butylene glycol, dms., c.l., t.l., dlvd	lb.	.20½	- —
dms., l.c.l., l.t.l., f.o.b. works	lb.	.22	- —
tanks, dlvd	lb.	.18	- —
p-tert-Butylphenol, bgs., c.l., dlvd.,	lb.	.27½	- —
bgs., l.c.l., works	lb.	.28½	- —
Butyraldehyde, dms., c.l., dlvd	lb.	.22	- —
dms., l.c.l., dlvd.	lb.	.23½	- —
tanks, dlvd.	lb.	.19½	- —
Butyric acid, 99%, dms., c.l., frt. equald.	lb.	.34	- —
dms., l.c.l., same basis	lb.	.34½	- —
tanks, same basis	lb.	.32½	- —
Butyric ether (see Ethyl butyrate).			
Butyrolactone, dms., c.l., t.l., works.	lb.	.40	- —
dms., l.c.l., same basis	lb.	.43	- —

C

Cacao butter (see Cocoa butter).			
Cadmium CP red dark shade, bbls., frt. alld. E. of Rockies	lb.	5.55	- —
Light shade, bbls., same basis	lb.	4.65	- —
medium shade, bbls., same basis.	lb.	5.30	- —
Medium light shade, bbls., same basis	lb.	4.90	- —
Orange-red shade, bbls., same basis	lb.	4.30	- —
Yellow, all shades, bbls., frt. alld. E. of Rockies	lb.	2.85	- —
Cadmium iodide, 25-lb. fib. dms	lb.	6.75	- 7.00
Cadmium metal, ingots or sticks, ton lots, cs., dlvd	lb.	1.30	- —
Cadmium-mercury lithopone orange, deep shade, bbls., frt. alld E. of Rockies	lb.	1.65	- —
Cadmium-mercury lithopone red, dark shade, bbls., same basis	lb.	1.95	- —
Red, light shade, bbls., same basis.	lb.	1.72	- —
Red, medium shade, bbls., same basis	lb.	1.87	- —
Red, medium light shade, bbls., same basis	lb.	1.80	- —
Red, maroon shade, bbls., same basis	lb.	2.03	- —
Cadmium-selenide lithopone maroon, bbls., frt. alld E. of Rockies	lb.	2.76	- —
Orange, bbls., same basis	lb.	1.58	- —
Cadmium-selenide lithopone red, orange-red shade, bbls., same basis	lb.	1.72	- —
Red, dark shade, bbls., same basis.	lb.	2.56	- —
Red, light shade, bbls., same basis.	lb.	1.88	- —
Red, medium shade, bbls., same basis	lb.	2.00	- —
Red, medium-light shade, bbls., same basis	lb.	2.23	- —
Calmium-selenide lithopone, yellow, all shades, bbls., frt. alld. E. of Rockies	lb.	1.19	- —
Caffeine, NF, citrated, dms., 100-lb. lots or more	lb.	2.70	- —
USP, nat., cryst., anhyd., dms., 100-lb lots or more	lb.	2.10	- —
Caffeine, USP, nat., cryst., hydrous, dms., 100-lb. lots or more.	lb.	1.96	- —
USP, syn., anhyd., dms., 100-lb. lots or more	lb.	2.10	- —
cryst., hydrous, dms., 100-lb. lots or more	lb.	1.96	- —
Cajuput oil, native, cns.	lb.	1.75	- 2.00
Redist., USP. cns.	lb.	1.90	- 2.10
Calamine, USP. dms.	lb.	.34	—
Calamus oil, bots.	lb.	12.00	- 20.00
Calciferol, cryst., 10-kilo or more lots, works	gram.	.54	- —
1-10 kilo lots	gram.	.55	- —
Calciferol, in edible oil (see Viosterol).			
Calcium p-aminosalicylate trihydrate, fib, dms., 100 lbs. or more, frt. adjusted	lb.	3.10	- —
Calcium arsenate, dealers, bgs., c.l., frt. alld.	lb.	.09	- .09¼
bgs., l.c.l., same basis	lb.	.10	- .10½
Calcium bromide, NF, jars, 100 lbs. or more	lb.	.97	- —
Calcium carbide, standard generator size, 600-lb. dms., c.l., dlvd	ton.	149.00	- —
Calcium carbonate, nat., dry-grd., air floated, 325 mesh, bgs., c.l., works	ton.	10.50	- —
Calcium carbonate, chalk, whiting, 325 mesh, bgs., c.l., works.	ton.	32.00	-34.00
water-grd., ⅓ to 10 microns, bgs., c.l., works	ton.	30.00	- —
10 to 20 microns, bgs., c.l., works	ton.	17.00	-18.00
precip., dense, bgs., c.l., works.	ton.	30.00	-38.50
bgs., l.c.l., works	ton.	45.00	-53.50
medium, bgs., c.l., works	ton.	38.00	- —
bgs., l.c.l., works	ton.	48.00	-53.00
Calcium Carbonate, surface treated, bgs., c.l., works	ton.	42.00	-44.00
bgs., l.c.l., works	ton.	57.00	-59.00
ultrafine, bgs., c.l., works.	ton.	117.50	-167.50
bgs., l.c.l., works	ton.	137.50	-187.50
Calcium chloride, conc., flake or pellet, 94-97%, paper bgs., c.l., works, frt. equald.	ton.	39.30	- —
Flake, 77-80%, paper bgs., c.l., works, frt. equald	ton.	32.00	- —
Liquor, 40%, tanks, frt. equald.	ton.	12.50	- —
Powd., 77% min., paper bgs., c.l., works, frt. equald.	ton.	37.00	- —
Purif., gran., dms.	lb.	.27	- —
Calcium chloride, solid, 73-75%, dms., c.l., frt. equald.	ton.	29.50	- —
dms., l.c.l., works, frt. equald.	ton.	36.00	-73.00
USP, gran., dms.	lb.	.32	- —
Calcium chromate, bgs., dlvd	lb.	.37	- —
Calcium cyanide dms., c.l., dlvd. E. of Rockies	lb.	.20	- —
dms., l.c.l., same basis	lb.	.24	- .53
Calcium cyclamate, 100-lb. dms	lb.	1.95	- —
Calcium gluconate, USP, AA grade, 100-lb. dm., ton	lb.	.73½	- —
USP, powd., 100-lb. dm., ton	lb.	.66½	- —
Calcium hydride, lump, dms., works.	lb.	2.20	- 3.00
Calcium hypochlorite, high test, gran., 45-lb. cs., dlvd. E. of Rockies	cs.	23.85	-25.60
100-lb. dms., same basis	dm.	33.30	-36.55
Calcium hypophosphite, dms., 1,000-lb. lots	lb.	1.23	- —
Calcium Iodide, jars	lb.	4.52	- —
Calcium lactate, NF, dms., f.o.b. works	lb.	.43	- .46
Calcium mandelate, USP, 150-lb. dm., works	lb.	3.25	- —
Calcium naphthenate, liq., 4% Ca., dms., frt. equald	lb.	.30	- —
Calcium pantothenate, USP, jars, 1 kilo or more	kilo.	35.00	- —
Calcium para-aminosalicylate (see Calcium p-aminosalicylate).			
Calcium phenosulfonate, dms.	lb.	1.24	- 1.25
Calcium phosphate, dibasic, USP, bgs., c.l., frt. equald.	100 lbs.	16.00	- —
Dibasic, feed grade, 18½% P, bgs., c.l., t.l., frt. equald	ton.	86.00	- —
bgs., c.l., t.l., f.o.b. Texas City works	ton.	80.50	- —
bgs., l.c.l., frt. equald	ton.	96.00	- —
Dibasic, feed grade, 21% P., bgs., c.l., t.l., frt. equald	ton.	97.65	- —
bgs., l.c.l., frt. equald	ton.	107.65	- —

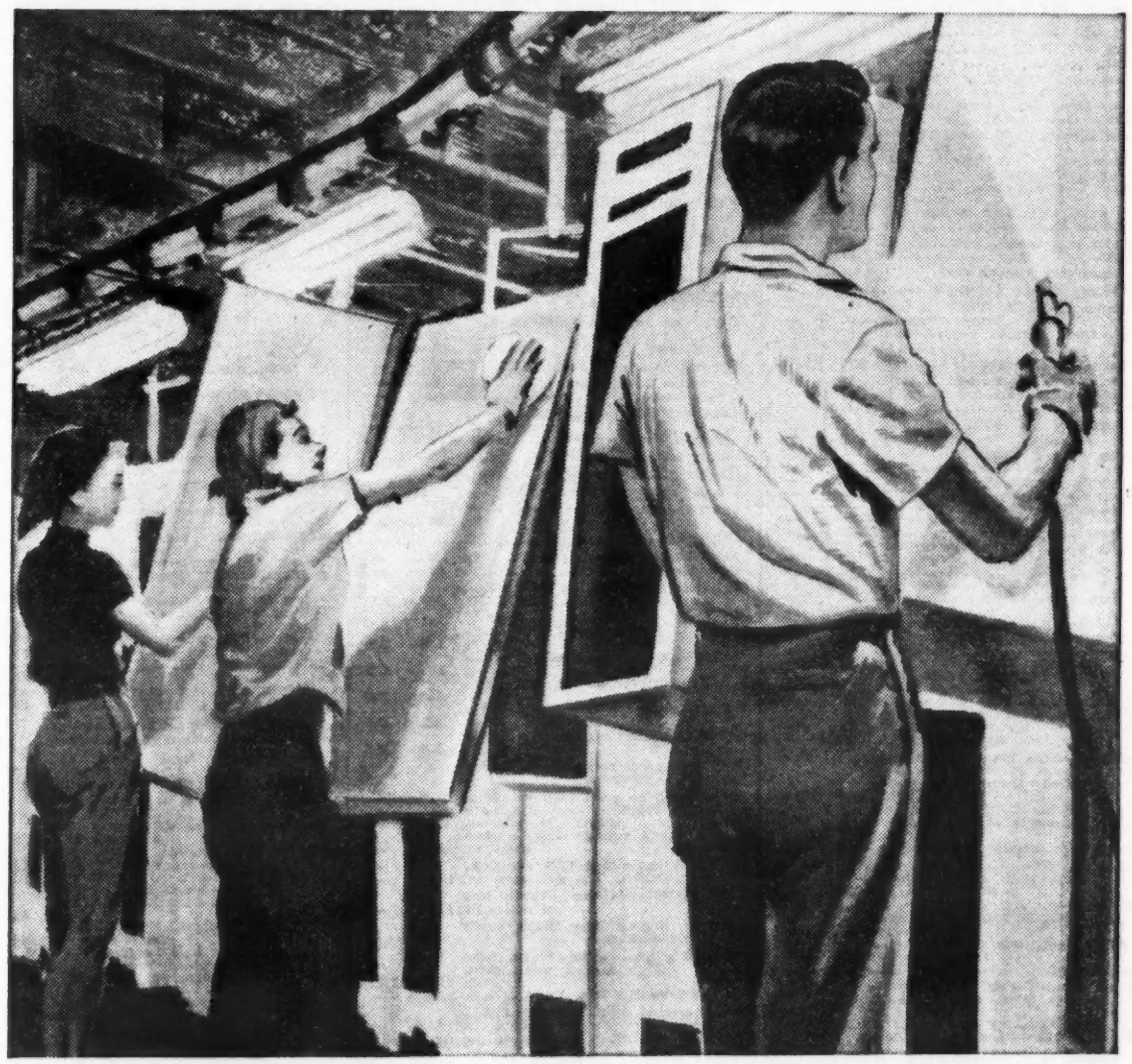
Prices of calcium phosphate dibasic in bulk $3 per ton less than bgs., c.l., prices.

Calcium phosphate, monobasic, bgs., 10,000-lb. lots, frt. equald.	100 lbs.	7.45	- —
bgs., smaller lots, same basis.	100 lbs.	7.95	- —
Tribasic, NF, precip., bgs., c.l., works, frt. equald	100 lbs.	9.25	- —
bgs., l.c.l., frt. equald.	100 lbs.	10.00	- —
Calcium propionate, any quantity, dms., dlvd. E. of Rockies.	lb.	.34½	- —

Prices W. of Rockies 3c. per lb. more.

Calcium phytate, bgs., 50 lbs. or more f.o.b. warehouse N. Y.	lb.	.39	- —
Calcium resinate, precip., dms., ton lots. frt. alld., works	lb.	.40¼	- —
Calcium silicate, hydrated, bgs., c.l., works	lb.	.06	- —
bgs., l.c.l., works	lb.	.06½	- —

WHAT'S NEWS IN CHEMICALS



BUTON* RESINS

New lower-cost polymers for quality appliance primers!

Good chemical and abrasion resistance plus excellent adhesion to metal surfaces are just a few of the many excellent properties Buton Resins provide for appliance primers. These versatile low-cost polymers can be blended with urea, melamines, short and medium oil alkyds to obtain specific properties. They are curable by conventional means and by a new process called flame curing which enhances the properties of Buton rather than degrading them, as is the case with other resins. Flame Curing is 20 to 50 times faster than conventional methods. Buton Resins can be used in fine furniture finishes as well as primers for metals of all types. For technical assistance or to order Buton Resins contact the nearest Enjay office. *Home Office:* 15 West 51st Street, New York 19, N.Y. *Other Offices:* Akron • Boston • Charlotte • Chicago • Detroit • Houston • Los Angeles • New Orleans • Tulsa *Trademark

EXCITING NEW PRODUCTS THROUGH PETRO-CHEMISTRY

ENJAY CHEMICAL COMPANY

A DIVISION OF HUMBLE OIL & REFINING COMPANY

ENJAY PETROCHEMICALS

Calcium silicate, paint grade (see Wollastonite).
Calcium stearate, ctns., c.l. ..... lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Calcium sulfate (see Gypsum).
Calcium, NF, mild, powd., dms., 100-lbs., f.o.b. works lb. 4.32 - —
N. F., mild, precip., dms., 100-lbs., f.o.b. works lb. 5.67 - —
Camphene, 46° m.p., dms. incl., c.l., works lb. .15 - —
dms. incl., l.c.l., same basis lb. .16½- —
tanks, same basis ..... lb. .12½- —
Camphene, chlorinated, 67-69% (see Toxaphene).
Camphor, monobromated, NF, dms., kgs lb. 3.63 - 3.70
Nat., USP, powd., cs., 100-lb. lots. lb. .60 - .65
tablets, 1-oz. cs. ..... lb. .85 - .90
Nat., USP, gran., bbls., 2,000-lb. lots lb. .59 - —
Syn., tech., 1 bbl. or more lb. .48 - —
Syn., USP, gran., powd., bbls., 1,000-lb. lots lb. .60 - —
bbls., smaller lots ..... lb. .61 - —
tablets, ctns., 1,000-lb. lots. lb. .85 - —
ctns. 500-lb. lots ..... lb. .86 - —
ctns., smaller lots ..... lb. .87 - —
Camphor oil, sassafrassy, dms. ..lb. .35 - .55
White, dms. ..... lb. .26 - .50
Cananga oil, native, cns. ..... lb. 5.00 - 6.50
Rectified, cns. ..... lb. 7.25 -10.00
Candelilla wax, crude, bgs. ..... lb. .55 - .58
Refd., pure, bgs. ..... lb. .60 - .63
Powdered Candelilla wax 20 to 100 mesh, 8c. higher.
Cantharides, Chinese, cs. ..... lb. 1.00 - —
powd., bgs. ..... lb. 1.15 - —
Russian, bgs. ..... lb. 2.00 - 2.15
powd., bgs. ..... lb. 2.15 - 2.30
Capric acid, dms. ..... lb. .32¼- .34¾
tanks ..... lb. .29¾- —
Caprolactum monomer, bgs., c.l., t.l., f.o.b. works lb. .52 - —
bgs., l.c.l., t.t.l., same basis lb. .57 - —
tanks, same basis ..... lb. .49 - —
Capryl alcohol, 85% dms., c.l., t.l., works lb. .19 - —
dms., l.t.l., same basis ..... lb. .19½- —
tanks, frt. equald. ..... lb. .16½- —
Sec., 92-99%, dms., c.l., f.o.b. works lb. .22 - —
dms., l.c.l., f.o.b. works ... lb. .23 - —
tanks, f.o.b. works ..... lb. .19½- —
Caprylic acid, dms. ..... lb .32¼- .34¾
tanks ..... lb. .29¾- —
Capsicum (see Pepper red).
Capsicum oil (see Capsicum oleoresin).
Capsicum oleoresin, NF, from dom. pepper, dms. lb. 4.00 - —
NF, from African pepper, dms. lb. 4.50 - —
Caraway oil, NF, dms. ..... lb. 3.15 - 3.40
Caraway seed, Danish, bgs. ..... lb. .16 - —
Dutch, bgs. ..... lb. .20½- —
Polish, bgs. ..... lb. .17¼- —
Carbazole, 97%, bbls, ton lots, works lb. 1.05 - —
Carbon black, channel, rubber beads, bulk, c.l., works lb. .08 - —
bgs., c.l., works ..... lb. .08½- —
bgs., l.c.l., works ..... lb. .16¼- —
Furnace fast extruding, bgs., c.l., works lb. .06¾- —
ctns., l.c.l., whse. ..... lb. .13½- —
Carbon black, high abrasion, bulk, c.l., works lb. .07¼- —
bgs., c.l., works ..... lb. .07¾- —
bgs., l.c.l., dlvd. or whse lb. .14½- —
high modulus, bgs., c.l., works. lb. .06¼- —
ctns., l.c.l., whse. ..... lb. .13 - —
semi-reinforcing, bgs., c.l., works lb. .05¾- —
bgs., ctns., l.c.l., whse. ... lb. .12½- —
pigment, high color beads, ctns., c.l., works lb. .78 - —
ctns., l.c.l., dlvd. or whse lb. .87 - —
medium color, uncompressed, bgs., c.l., works lb. .14 - —
bgs., l.c.l., dlvd. or whse lb. .22½- —
Carbon dioxide, indust., wholesale, bulk, 30,000-2,999,999 lbs., dlvd. Metropolitan areas, E ton.60.00 -115.00
bulk, 3,000,000 lbs. or more, dlvd. Metropolitan areas, E ton.55.00 - —
Solid, bulk, wholesale, works ton.85.00 - —
Carbon disulfide, 55-gal. dms., c.l., works, frt. equald to competitive points lb. .071 - —
55-gal. dms., l.c.l., same basis lb. .086 - .091
5-gal. dms., 30 dms. to c.l., same basis lb. .131 - —
5-gal. dms., less than 30 dms., same basis lb. .161 - —
tanks, dlvd. ..... lb. .0520- —
Carbon tetrachloride, CP, consumers, dms., c.l., frt. alld. lb. .12¾- —
dms., l.c.l., frt. alld. ..... lb. .15¼- —
Tech., consumers, dms., c.l., t.l., frt. alld lb. .11¾- —
dms., l.c.l., l.t.l., frt. alld lb. .14¼- —
tanks, frt. alld ..... lb. .10¾- .11¼
Carboxymethyl cellulose (see CMC).
Carbromal, NF, dms., 100-lb lots, works lb. 4.00 - 4.25
dms., smaller lots, works .... lb. 4.10 - 4 75
Cardamom oil, NF, bots. ..... lb.39.00 -42.00
Cardamom seed, bleached "A" .lb. 3.50 - —
Bleached "B" ..... lb. 3.10 - —
Decorticated Alleppey, cs. .... lb. 2.30 - —
Guatemala, cs. ..... lb. 3.05 - —
Green, Alleppey, bgs. ..... lb. 2.15 - —
Ceylon, bgs. ..... lb.. 2.15 - —
Carmine No. 40, NF, bulk, 100-lb. lots or more, dlvd. ....lb.16.80 - —
bulk, smaller lots, dlvd. ....lb.16.90 -17.30
Carnauba wax, chalky, bgs., ton lots lb. .72 - .73
North Country, No. 2, crude, bgs., ton lots lb. .82 - .84
refd., pure, ton lots ..... lb. .91 - .92
North Country, No. 3, Ceara, ton lots lb. .74 - .75
Ceara, refd., pure, bgs., ton lots lb. .82 - .83
North Country, No. 3, Parnahyba, ton lots lb. .75 - .76
Parnahyba, refd., pure, bgs., ton lots lb. .83 - .84
No. 1, Ceara, yellow, bgs., ton lots, lb. 1.02 - 1.03
Parnahyba, yellow, bgs., ton lots lb. 1.03 - 1 05
Powdered carnauba wax, 20 to 100 mesh 8c. per lb. higher.
Carotene, tech., 1,350,000 A units per gram tins, 5-10 kilo lots, dlvd gram. .20½- —
in carrot oil, 5,000,000 to 8,000,000 A units per lb., dms., works million units. .12 - —
USP, microcrystalline in oil, 400,000 A units per gram., dms., dlvd million units. .144 - —
b-Carotene, in vegetable oil, semi-solid suspension, 400,000 A units per gram, cns. kilo.240.00 - —
b-Carotene, liquid in vegetable oil, 500,000 A units per gram, cns. kilo.57.60 - —
Pure, cryst., 1,600,000 to 1,670,000 A units per gram, cns. kilo.72.00 - —
Carvol, bots. ..... lb. 5.00 - 5.40
Cascara sagrada bark, bulk ..... lb. .32 - —
Casein, dom., edible, acid precip., 30 mesh., bgs., 10,000-lb. lots or more, works lb. .56 - —
edible, acid, precip., 80 mesh, bgs., 10,000-lb. lots or more, works lb. .64 - —
Imp., inedible, acid-precip., gro., Argentine, bgs., c.l., ex-dock, Eastern seaports lb. .20¼- .20½
Australian, bgs., c.l., same basis lb. .22¼- .22½
Cashewnut shell, liquid, treated, dms., c.l., Newark, N. J. lb. .22 - —
dms., ton lots, same basis .. lb. .23 - —
dms., ton lots, same basis .. lb. .25 - —
Cassella acid, dms., frt. alld., 100% basis lb. 1.44 - 1.75
Cassia oil, redist., USP, cns. ..... lb. 7.50 - 9.00
Cassia, Padang, "A," b/s. ..... lb. .30 - —
"B," bls. ..... lb. .29 - —
"C," bls. ..... lb. .28 - —
Korintje "A," bls. ..... lb. .34 - —
"B," bls. ..... lb. .30 - —
"C," bls. ..... lb. .30 - —
Castor oil, dom., blown, dms., c.l. lb. .2550- —
dms., l.c.l. ..... lb. .2650- —
Castor oil, dom., dehydrated, bodied, dms., c.l. lb. .2700- —
dms., l.c.l. ..... lb. .2850- —
tanks ..... lb. .2500- —
dehydrated, unbodied, dms., c.l. lb. .2500- —
dms., l.c.l. ..... lb. .2660- —
tanks, same basis ..... lb. .2360- —
hydrogenated, bgs., c.l. ..... lb. .2450- —
bgs., ton lots ..... lb. .2850- —
bgs., l.c.l., dlvd. ..... lb. .3050- —
No. 1, dms., c.l. ..... lb. .2150- —
dms., l.c.l. ..... lb. .2300- —
tanks ..... lb. .2000- —
No. 3, tech., dms., c.l. ..... lb. .2125- —
dms., c.l. ..... lb. .2225- —
tanks ..... lb. .1925- —
Refd. deod., dms., c.l. ..... lb. .2650- —
dms., l.c.l. ..... lb. .2750- —
tanks ..... lb. .2450- —
USP, dms., c.l. ..... lb. .2350- —
dms., l.c.l. ..... lb. .2450- —
tanks ..... lb. .2150- —
Imported, No. 1, Braz., tanks .lb. .18¾- .19
Sulfonated, 50%, dms., works lb. .15 - .15½
75%, dms., works ..... lb. .19 - .19½
Castor oil acids, dehydrated, dms. lb. .44¼- .46¼
Split, dms. ..... lb. .37¼- .38¼
Castor pomace, bgs., c.l., works ton.35.00 - —
Castoreum nat., cns. ..... lb. 5.25 - —
Syn., cns. ..... lb. 9.00 - —
Catechol, CP, cryst., fib., dms., works lb. 2.17½- —
Resub., dms., works ..... lb. 4.29½- —
Catnip leaves, Southern, bls. ..... lb. Nominal.
Caustic potash (see Potash caustic).
Caustic soda (see Soda, caustic).
Cedarleaf oil, USP XIII cns., dms. lb. 3.25 - 3.50
Cedarwood oil, cns., dms. ..... lb. .70 - —
Celery seed, French, bgs. ..... lb. .33 - —
Indian, bgs. ..... lb. .19 - —
Cellulose acetate, flake, powd., bgs., t.l., dlvd. E lb. .36 - .51
Cellulose acetate-butyrate, powd., 17% butyryl content, bgs., dlvd. E lb. .545 - .555
27% butyryl content, bgs., dlvd. E lb. .595 - .605
38% butyryl content, bgs., dlvd. E lb. .545 - .555
38% butyryl content, half-second, bgs., dlvd. E lb. .545 - .555
50% butyryl content, bgs., dlvd. E lb. .585 - .595
Cellulose gum, methyl (see Methyl Cellulose).
Cellulose gum, pure, high vis., bgs., 23,000-lb. lots or more works, frt. alld lb. .57 - —
bgs., smaller lots, same basis lb. .59 - —
Cerium hydrate 74% CeO, fib. dms., 100-lb. lots or more lb. 1.40 - —
77% CeO, fib. dms., 100-lb. lots or more lb. 1.74 - —
Cerium oxalate (see Rare earth oxalate).
Cerium oxide, optical grade, bgs., 50-lb. lots or more, dlvd. lb. 1.85 - 1.90
bgs., smaller lots, dlvd. ..... lb. 2.15 - —
Cetyl alcohol, NF, fib. cns., c.l., t.l., dlvd. E lb. .41½- —
fib. cns., l.c.l., same basis lb. .43½- —
Extra, cns., c.l., t.l., dlvd. E lb. .48½- —
fib. cns., l.c.l., same basis lb. .50½- —
tanks, same basis ..... lb. .46 - —
Chalk (see Calcium carbonate).
Chamomile flowers, Hungarian, bls. lb. .90 - 1.00
Roman, cs. ..... lb. 1.50 - 1.75
Chamomile oil, blue Hungarian, bots lb.350.00 - —
Charcoal, activated, NF, fib. dms., c.l., works lb. .25 - .32
fib. dms., 5-ton lots, works .lb. .26½- .32½
fib. dms., smaller lots, works lb. .27 - .50
Charcoal, black (see Charcoal, activated).
Charcoal, bone (see Bone black).
Charcoal, hardwood, lump, bulk, c.l., f.o.b. plant ton.55.00 - —
briquets, bulk, c.l., f.o.b. plant. ton.80.00 - —
5-lb. paper bgs., c.l., same basis ton.106.00 - —
20-lb. paper bgs., c.l., f.o.b. plant, ton.90.00 - —
40-lb. paper bgs. c.l., same basis ton.86.00 - —
Chenopodium oil, NF, cns ..... lb. 4.25 - 5.00
Chicago acid, paste, bbls., frt. alld. lb. 3.21 - —
Chinawood oil (see Tung oil).
Chloral, tech., 94% min., dms., c.l., works lb. .23 - —
dms., l.c.l., works ..... lb. .24 - —
tanks, multiple units, 5 cars, cms., l.c.l., works ..... lb. .21 - —
Chloral hydrate, USP, jars, 1,000-lb. lots lb. 1.00 - —
jars, 500-lb. lots ..... lb. 1.03 - —
jars, 100-lb. lots or less ..... lb. 1.05 - —
Chlordan, agricultural, dms., c.l., frt. alld lb. .65 - —
dms., l.c.l., 5,000-10,000-lb. lots, frt. alld lb. .66 - —
Chlordan, clarified, dms., c.l., frt. alld lb. .69 - —
dms., l.c.l., 5,000-10,000-lb. lots, frt. alld lb. .70 - —
Chlorinated paraffin, 42%, dms., c.l., frt. alld lb. .16¾- —
dms., l.c.l., 10 dms. or more, same basis lb. .17¼- —
70%, dms., c.l., same basis lb. .18½- —
dms., l.c.l., 10 dms. or more, same basis lb. .19½- —
Chlorinated rubber, 5, 10, 20 cps., ctns., c.l., works lb. .60 - —
ctns., l.c.l., works ..... lb. .61 - —
125, 1,000 cps., ctns., c.l., works. lb. .70 - —
ctns., l.c.l., works ..... lb. .71 - —
Chlorine, liq., cyls., c.l., works, frt. equald lb. .11 - —
cyls., l.c.l., Metropolitan area lb. .12½- .13¾
tanks, single units, works, frt. equald 100 lbs. 3.25 - —
tanks, multiple units, 5 cars, works, frt. equald 100 lbs. 4.15 - —
tanks, multiple units, 4 cars, same basis 100 lbs. 4.35 - —
tanks, multiple units, 2 cars, same basis 100 lbs. 5.35 - 5.85
tanks, multiple units, 1 car, same basis⅔ 100 lbs. 6.25 - 7.25
Chloroacetic acid, mono, flake, 99%, purif., dms., c.l lb. .23½- .25½
dms., l.c.l. ..... lb. .24½- —
tech., flake, 96-97%, dms., c.l., dms., l.c.l., frt. equald lb. .20 - —
frt. equald lb. .19 - —
2-Chloro-4-aminotoluene, tech., liq., dms., frt. alld lb. 1.03 - —
4-Chloro-2-aminotoluene, fused, bbls. lb. 1.38 - —
6-Chloro-2-aminotoluene, tech., liq., dms., frt. alld lb. .66 - —
m-Chloroaniline, dms., c.l., frt. alld. lb. .75 - —
dms., l.c.l., same basis ..... lb. .77 - —
tanks, same basis ..... lb. .73 - —
o-Chloroaniline, dms., c.l., frt. alld. lb. .52 - —
dms., l.c.l., same basis ..... lb. .54 - —
tanks, same basis ..... lb. .50 - —
p-Chloroaniline, dms., c.l., frt. alld. lb. .77 - —
dms., l.c.l., same basis ..... lb. .79 - —
o-Chlorobenzaldehyde, dms., t.l., works lb. 1.05 - —
dms., l.t.l., same basis ..... lb. 1.20 - —
o-Chlorobenzaldehyde, dms., l.c.l., works lb. 1.95 - —
o-Chlorobenzoic acid, fib. dms., t.l., works lb. 1.10 - —
fib. dms., smaller lots, works lb. 1.25 - —
p-Chlorobenzoic acid, fib. dms., 2,000-lbs. or more, works. lb. 2.25 - —
fib. dms., less than 2,000-lbs., same basis lb. 2.30 - —
Chloroform, tech., dms., c.l., dlvd. E lb. .18 - —
dms., l.c.l., same basis ..... lb. .19 - —
tanks, same basis ..... lb. .17 - —
USP, dms., c.l., dlvd. ..... lb. .27 - —
dms., l.c.l., dlvd. ..... lb. .30 - —
tanks, minimum 4,000 gals. dlvd. lb. .25 - —
2-Chloro-4-nitroaniline, paste, dlvd. E., 100% basis lb. .81 - —
Powd., dlvd. E., 100% basis lb. .86¼- —
4-Chloro-2-nitroaniline, powd., dlvd. E lb. .86 - —
4-Chloro-2-nitrophenol, tech., paste, dms., frt. alld lb. .75 - —
4-Chloro-2-nitrotoluene, tech., solid, dms., frt. alld lb. .99 - —
6-Chloro-2-nitrotoluene, tech., solid, dms., frt. alld lb. .17 - —
o-Chlorophenol, dms., c.l., frt. equald lb. .37 - —
dms., l.c.l., same basis ..... lb. .38 - —
p-Chlorophenol, dms., c.l., frt. equald lb. .37 - —
dms., l.c.l., same basis ..... lb. .38 - —
Chloropicrin, coml., cyls., 180 lbs., frt. alld lb. 1.07 - —
cyls., 100 lbs., same basis .lb. 1.08 - —
cyls., 50 lbs., same basis .. lb. 1.14 - —
Chlorosulfonic acid, dms., c.l., frt. equald lb. .0465- —
dms., l.c.l., frt. equald ..... lb. .0515- —
tanks, frt. equald ..... lb. .0415- —
Chlorosulfonic acid, in stainless steel dms.½c. per lb. higher
o-Chlorotoluene, tech., dms., t.l., works lb. .37 - —
dms., l.c.l., t.l., same basis lb. .38 - —
Choline bitartrate, fib. dms., frt. adjusted kilo 2.75 - 3.00
Choline chloride, fib. dms., frt. adjusted kilo. 2.75 - 3.00
Choline dihydrogen citrate, fib. dms., frt. adjusted kilo. 2.75 - 3.00
Chrome green, CP, dark, light, medium blue content, 1-15%, bbls., dlvd. E. of Rockies. lb. .43 - —
blue content, 16-30%, bbls., same basis lb. .44 - —
medium blue content, 31-45%, bbls., same basis lb. .44 - —
blue content, 45-49%, bbls., same basis lb. .45 - —
Reduced color 25%, bbls., same basis lb. .20 - —
Chrome green prices 1c. higher W. of Rockies.
Chrome orange, CP, bbls., dlvd. E of Rockies lb. .35 - —
Chrome orange prices 1c. higher W. of Rockies.
Chrome yellow, CP, bbls., dlvd. E. of Rockies lb. .35 - —
Chrome yellow price 1c. higher W. of Rockies.
Chromic acid, 99¾%, dms., c.l., works, frt. equald lb. .29½- —
dms., l.c.l., dlvd. N. Y. Metropolitan area lb. .30 - .31
Chromic acid, NF (see Chromium trioxide).
Chromium acetate, soln., 7½%, dms., 500-2,000-lb. lots, works. lb. .10 - —
Chromium fluoride, bbls., works .lb. .51 - .52
Chromium oxide, hydrated, bbls., fib. dms., c.l., frt alld. lb. 1.20 - —
Pure, bgs., c.l., frt. alld ..... lb. .44½- —
bgs., l.c.l., same basis ..... lb. .45¼- —
Chromium trioxide, NF, bots .... lb. 1.15 - —
Cinchona bark, NF, red, broken, bgs lb. .25 - —
NF, yellow, broken, bgs ..... lb. .35 - .40
Cinnamic acid, refd., bots ..... lb. 2.50 - 3.50
Cinnamic alcohol, bots. ..... lb. 1.60 - 1.75
Cinnamic aldehyde, dms. ..... lb. .80 - 1.00
Cinnamon, Ceylon, No. 2, bgs. lb. .56 - —
Ceylon, No. '0000,' bgs ..... lb. .76 - —
Cinnamon bark oil, bots ..... lb.36.00 -70.00
Cinnamon leaf oil, crude, dms. .lb. 1.60 - 2.00
USP, (Cassia), cns., dms ..... lb. 8.50 -13.50
Citral, CP, bots. ..... lb. 3.60 - 4.00
Extra, bots. ..... lb. 3.60 - 5.00
Syn., dms. ..... lb. 7.25 - 7.40
Citric acid, USP, anhyd., fine gran., bgs., dms., c.l lb. .29½- .30
bgs., dms., 10,000-lb. lots, 1 shipt lb. .30 - .30½
bgs., dms., smaller lots .lb. .30½- .31
Citric acid, USP, hydrous, fine gran., bgs., dms., c.l. lb. .27¼- .28
bgs., dms., 10,000-lb. lots, 1 shipt lb. .28 - .28¼
bgs., dms., smaller lots .lb. .29 - .29¼
Powdered citric acid ½c. per lb. higher.
Citronella oil, Ceylon, dms ..... lb. 1.00 - —
Java-type, dms. ..... lb. .92 - —
Citronellal, bots., dms ..... lb. 1.60 - 2.10
Citronellol, bots., dms. ..... lb. 1.90 - 2.50
Citronellol, synthetic, dms ..... lb. 1.70 - —
Civet, artif., bots ..... lb.13.75 -15.00
Nat., bots. ..... oz. 8.50 -15.00
Clay, ball., dom., airfloated, bgs., c.l., Tenn ton.17.50 -21.50
crushed, shed moisture, bulk, c.l., Tenn ton. 8.00 -11.00
imp., airfloated, bgs., c.l., Atl. port net-ton.42.00 -45.75
lump, bulk, Atl. port net-ton.29.50 -35.75
Clay, China, dom., dry-grd., air-floated, 99%, 325 mesh, Georgia, bgs., c.l., works. ton.10.00 -12.00
Georgia, bgs., l.c.l., works. ton.15.50 - —
dom., airfloated, 99%, 300 mesh bgs., c.l., Georgia, works. ton.13.50 -14.50
bgs., l.c.l., ex-whse .. ton.35.00 -36.00
imp., white, lump, bulk, c.l., ex-dock, Philadelphia, Portland, Me long-ton.20.00 -35.00
white, powd., bgs., c.l., ex dock. net-ton.50.00 - —
bgs., l.c.l., ex whse net-ton.60.00 -70.00
Cleaners naphtha, petroleum, 105° F Flash, tankcars, New Jersey and New York gal. 18 - —
Group 3 ..... gal. .12875- —
Houston, Texas ..... gal. .145 - —
140° F Flash, tankcars, New Jersey or New York gal. .205 - —
Group 3 ..... gal. .154 - —
Houston, Texas ..... gal. .17 - —
Cleve's acid, tech., mixed, solid, dms., frt. alld lb. 1.05 - —
1.6, tech., solid, dms., frt. alld lb. .77 - —
1.7, tech., dms., frt. alld ..... lb. 2.20 - —
Cloves, Madagascar, bgs ..... lb. .37½- —
Zanzibar, bgs. ..... lb. .37 - —
Clove bud oil, USP, dms ..... lb. 2.70 - 3.60
Clove leaf oil, crude, dms. ..... lb. 1.25 - —
CMC, crude, 96.4% low or medium vis., bgs. or fib. dms., 23,000 lbs., dlvd. E., 100% basis lb. .41½- —
96.4% low, or medium vis., bgs. or fib. dms., less than 23,000 lbs., dlvd. E., 100% basis lb. .43½- —
65%, low or medium vis., bgs., or fib. dms., c.l., dlvd. E., 100% basis lb. .41½- —
bgs. or fib. dms., l.c.l., dlvd. E., 100% basis lb. .43½- —
purif., high vis. (see Cellulose gum).
CMC, standard low or medium vis., bgs., 23,000 lbs., works, frt. alld lb. .57 - —
bgs., smaller lots, same basis. lb. .59 - —
CMC prices W. of the Rockies are 2c. per lb. lower and are on a works basis.
Coaltar, crude, resale for soin., tanks, works gal. .17 - —
Refd., resale, indust., dms., c.l., ex whse. gal. .35 - —
dms., l.c.l., ex whse .. gal. .39 - —
tanks, works ..... gal. .20½- —
Coaltar pitch, aluminum, bulk, works. ton.44.00 - —
Carbon and indust., bulk, works. ton.44.00 - —
Core, bulk works ..... ton.40.50 - —
Fiber, bulk works ..... ton.48.00 - —
Roofing, 140-155°F., Federal Specification RP-381 Type 1.
Cobalt acetate, 23.7% Co., dms., dlvd lb. 1.04 - —
Cobalt blue, genuine, 250 lb. bbls., dlvd. E. of Rockies lb. 4.90 - —
Cobalt blue prices 1c. higher W. of Rockies.
Cobalt blue, imitation (see Ultramarine blue).
Cobalt carbonate, 48% Co., powd., bgs., dlvd lb. 1.45 - —
Cobalt chloride, 24.2% Co., dms., dlvd lb. .93 - —
Cobalt hydrate, 60-61% Co., dms., dlvd lb. 2.05 - —
Cobalt linoleate, fused 8½% Co., dms lb. .71½- —
Liq., 6% Co., dms ..... lb. .57½- —
Cobalt metal, 99% dms., f.o.b. carrier lb. 1.50 - —
Cobalt naphthenate, liq., 6% Co., dms., dlvd lb. .48¾- —
Cobalt nitrate, 20.1% Co., bbls., dlvd. lb. .75 - —
Cobalt oxide, black, ceramic grade, 72½-73½% Co., kgs., dlvd. E of Mississippi R. lb. 1.15 - —
70-71% Co. kgs., same basis lb. 1.12 - —
Cobalt oxide prices W. of Mississippi R. 3c. per pound higher.
Cobalt phosphate, powd., 32.1% Co., dms., dlvd lb. 1.35 - —
Cobalt resinate, fused, 3% Co., dms. lb. .33½- —
Cobalt sulfate, cryst., 21% Co., dms., dlvd lb. .64 - —
Monohydrated, 33% Co., dms., dlvd lb. 1.09 - —
Cobalt tallate, 6% Co., dms., dlvd. lb. .44 - —
Cocaine, USP, cns., 100-oz. lots, f.o.b. works oz.17.50 - —
Cocaine hydrochloride, cns., 100-oz. lots, f.o.b. works oz.13.75 - —
Cocillana bark, bls ..... lb. .18 - .20
Cocoa butter, bgs ..... lb. .59 - .64
Coconut oil, crude, tanks, New York lb. .15 Nom.
tanks, Pac. coast ..... lb. .12⅞- —
Refd., deodorized, dms. ..... lb. .22 - .22¼
Coconut oil acids, dist., dms. .... lb. .26½- .29
tanks ..... lb. .24 - —
Double dist. (stripped), dms .... lb. .27½- .30
tanks ..... lb. .25 - —
Cod oil, dms., spot ..... lb. .08¾- .08¼
Codeine, NF, cns., 100-oz. lots oz.13.25 - —
Codeine hydrochloride, cns., 100-oz. lots oz.11.75 - —
Codeine phosphate, USP, cns., 100-oz. lots oz.10.25 - —
Codeine sulfate, USP, cns., 100-oz. lots oz.10.75 - —
Codliver oil, USP, dms ..... gal. 1.40 - 1.70
Cohosh root, black, bls ..... lb. .20 - .25
Blue, bls. ..... lb. .20 - .25
Colchicine, USP, bots ..... oz.29.00 - —
Colchicum root, bls ..... lb. .35 - .45
Colchicum seed, bgs ..... lb. .75 - .80
Collodion, USP, dms ..... lb. .32½- —
USP, flexible, dms ..... lb. .34 - —
Colocynth pulp, bls. ..... lb. .75 - —
Colombo root, bls ..... lb. .16 - .18
Condurango bark, bls ..... lb. .18 - .20
Congo copal gum, No. 1, bgs .... lb. .26 - .27
No. 2, bgs. ..... lb. .23 - .25
No. 3, bgs. ..... lb. .18 - .20
Copaiba balsam, cns., dms ..... lb. .60 - .65

Copaiba oil, cns	lb.	1.35	- 2.00
Copper acetate, bbls., c.l., works.	lb.	.53	- —
bbls., l.c.l., works	lb.	.54	- —
Copper carbonate, 55%, bgs., c.l., works	lb.	.3635-	—
bgs., l.c.l., works	lb.	.3785-	—
Copper chloride, cupric, anhyd., dms., works	lb.	.45½-	.46
cryst., dihydrate, dms., works.	lb.	.31	- .31½
cryst., dried, dms., works	lb.	.39¼-	.39¾
Copper chloride, cuprous, dms., works	lb.	.4135-	.4435
Copper cyanide, tech., dms., 20,000-lb. lots or more	lb.	.609	- —
dms., 1,000-lb. lots or more	lb.	.619	- —
dms., smaller lots	lb.	.639	- .65
Copper gluconate, dms	lb.	3.20	- —
Copper hydrate, dry, dms., c.l., frt. E. of Miss.	lb.	.53½-	—
dms., l.c.l., same basis	lb.	.54	- —
Copper metal, electrolytic, dlvd. Valley basis	lb.	.33	- .36
Copper naphthenate, liq., 8% Cu, dms, frt. alld	lb.	.28½-	—
Copper nitrate, tech., cryst., dms., works	lb.	.30¾	.32¾
Copper oleate, solid, 9% Cu, dms., works	lb.	.45	- —
Copper oxide, black, bbls., 100-5,000-lb. lots, works	lb.	.49¼-	—
Copper oxide, red, 97%, USN Type I, bbls., 100-5,000-lb. lots.	lb.	.50½-	—
90%, USN Type II, bbls., 100-5,000-lb. lots or more, works	lb.	.48½-	—
Copper quinolinolate, 18% Cu, dms., ton lots	lb.	4.25	- —
10% active quinolinolate, dms	lb.	1.14	- 1.15
Copper resinate, precip., dms., frt. alld	lb.	.41½-	—
Copper sulfate, CP, gran., dms., works	lb.	.1885-	—
Cryst., 99%, bgs., c.l., works. 100 lbs.		13.00	- —
bgs., l.c.l., works 100 lbs.		13.25	-15.75
Monohydrated, 35%, dms., c.l., works 100 lbs.		24.00	- —
dms., l.c.l., works 100 lbs.		24.75	- —
Tribasic, distributors, bgs., c.l., works 100 lbs.		29.60	- —
bgs., l.c.l., works 100 lbs.		31.10	- —
Copper undecylenate, dms	lb.	2.75	- —
Copra, Atl., Gulf ports, c.i.f.	ton.	180.00	- —
Pac. ports, c.i.f.	ton.	175.00	- —
Coriander oil, USP, bots.	lb.	8.75	- —
Coriander seed, Moroccan, bgs.	lb.	.09½-	—
Rumanian, bgs.	lb.	.07½-	—
Yugoslavian, bgs.	lb.	.08½-	—
Corn oil, crude, tanks, works	lb.	.12	- —
Foots (soapstock) acid 95%, tanks, New York	lb.	.05¼-	—
Refd., salad, dms	lb.	.1773-	.18
tanks	lb.	.1573-	—
Corn oil acids, dist., dms.	lb.	.15¾-	.18¼
tanks	lb.	.1648-	—
Corn sugar, tanners, chipped, paper bgs., c.l., 60,000 lbs. min.	100 lbs.	7.30	- —
paper bgs., l.c.l.	100 lbs.	7.45	- —
Corn syrup, 43° Be., tanks, f.o.b. plant	100 lbs.	6.59	- —
non-ret. dms., c.l., same basis.	100 lbs.	7.52	- —
Corrosive sublimate (see Mercuric chloride).			
Cortisone acetate, USP, bots., kilo or more	gram.	1.05	- 1.75
Costus oil, bots	oz.	6.00	- —
Cottonseed meal, 41%, bgs., Memphis	ton.	58.00	Nom.
Cottonseed oil, crude, tanks, South, East	lb.	.10¾	Nom.
tanks, Valley	lb.	.10¾	Nom.
tanks, Texas, Lubbock	lb.	.09¾	Nom.
tanks, Texas, Waco	lb.	.10	- —
Foots (soapstock), acid, 95%, tanks, New York	lb.	.03½-	—
Refd., salad, dms.	lb.	.15¼-	.15½
tanks	lb.	.13¼-	—
Cottonseed oil acids, dist., dms.	lb.	.15¾-	.18¼
tanks	lb.	.13½-	—
Coumarin, NF, cryst., dms.	lb.	3.30	- 3.40
Cramp bark, NF, bls	lb.	.90	- 1.00
Cream of tartar (see Potassium bitartrate).			
Creosote carbonate, NF, bots., cbys.,	lb.	3.05	- 3.20
Creosote, coaltar, crude, tanks, works, frt. adjusted	gal.	.24	- —
Crude, soln. 80%, tanks, works,	gal.	.226	- —
Refd., dms., c.l., works	gal.	.50	- —
dms., l.c.l., same basis	gal.	62	- —
tanks, same basis	gal.	.38	- —
West Coast creosote prices computed on a basis of 24c. per gallon for straight oil and 20c. per gallon for coaltar.			
Creosote, beechwood, cbys., dms., f.o.b. works, dlvd. in Metropolitan area	lb.	1.72	- 1.77
Hardwood, NF, cbys., dms., same basis	lb.	1.42	- 1.47
Pinewood, dms., incl., c.l., works.	lb.	.0561-	—
dms., incl., l.c.l., works	lb.	.0634-	—
dms., incl., l.c.l., ex whse, New York	lb.	.0745-	—
tanks, works	lb.	.0460-	—
Creosote oil (see Creosote coaltar).			
Cresol, tech., 50% below 204°C., dry above 207°C., wide distillation range, non-ret. dms., c.l., frt. alld	lb.	.16½-	—
non-ret. dms., l.c.l., same basis	lb.	.17½-	—
tanks, same basis	lb.	.145	- —
Cresol, USP, 50% 204°C., dry above 207°C., wide distillation range, non-ret. dms., c.l., same basis	lb.	.18	- —
non-ret. dms., l.c.l., same basis.	lb.	.19	- —
tanks, same basis	lb.	.16	- —
m-Cresol, 95-98%, dms., c.l., works.	lb.	.60	- —
dms., l.c.l., works	lb.	.61	- —
m-p-Cresol, 5-95% 3°C., dms., c.l., frt. equald.	lb.	.18	- —
dms., l.c.l., same basis	lb.	.19	- —
tanks, same basis	lb.	.16	- —
2.97% 2°C., dms., c.l., frt. equald.	lb.	.22	- —
dms., l.c.l., same basis	lb.	.23	- —
tanks, same basis	lb.	.20	- —
o-Cresol, 30.5°C. m.p. and over, ret., dms., c.l., frt. equald.	lb.	.17	- —
ret. dms., l.c.l., same basis.	lb.	.18	- —
tanks, same basis	lb.	.15	- —
30°-30.49°C. m.p., dms., c.l., frt. equald.	lb.	.16½-	—
ret. dms., l.c.l., same basis.	lb.	.17½-	—
tanks, same basis	lb.	.14½-	—
o-Cresol, 30.5°C. m.p. and over, ret.			
p-Cresol, 29°-29.9° C. m.p., dms., c.l., frt. equald.	lb.	.16	- —
ret. dms., l.c.l., same basis.	lb.	.17	- —
tanks, same basis	lb.	.14	- —
25°-28°C. m.p., dms., c.l., frt. equald.	lb.	.15	- —
ret. dms., l.c.l., same basis.	lb.	.16	- —
tanks, same basis	lb.	.13	- —
p-Cresol, 98%, dms., c.l., dlvd.	lb.	.52	- —
dms., l.c.l., dlvd	lb.	.53	- —
tanks, dlvd.	lb.	.49	- —

2,3-Cresotic acid, dms., ton lots, works	lb.	.70	- —
dms., smaller lots, works	lb.	.72	- —
p-Cresyl methyl ether, cns	lb.	1.80	- 2.05
Cresylic acid, coaltar, dom., meta-para content above 25%, resins and tricresyl phosphate grades, dms., c.l., t.l., frt. equald	gal.	1.35	- —
dms., l.c.l., same basis	gal.	1.40	- —
tanks, same basis	gal.	1.15	- —
metapara content 25% or less, dms., c.l., t.l., same basis	gal.	1.20	- —
dms., l.c.l., same basis	gal.	1.25	- —
tanks, frt. equald	gal.	1.00	- —
Cresylic acid, coaltar, imp., meta-para content 25% or less, f.o.b. works, frt. equald, to competitive points, 50 dms. or more.	gal.	1.03½-	—
less than 50 dms., same basis	gal.	1.05	- 1.15
tanks, same basis	gal.	1.00	- —
Crotonaldehyde, 91-93%, dms., l.c.l, works	lb.	.25	- —
Crotonic acid, dms., 200 lbs. or more, l.c.l., dlvd	lb.	.36	- —
Cryolite, nat., indust., bgs., c.l., works 100 lbs.		13.00	- —
bgs., l.c.l., works 100 lbs.		14.25	- —
Cube root, powd., 5% rotenone, bgs., t.l., works	lb.	.21	- —
bgs., l.t.l., works	lb.	.22	- —
Cubeb berries, NF, bgs	lb.	1.00	- —
Powd., cs.	lb.	1.15	- —
Cubeb oil, cns	lb.	12.00	-16.00
Cumene, dms., c.l., works	lb.	.12	- —
dms., l.c.l., works	lb.	.14	- —
tanks, works	lb.	.11	- —
Cumin seed, Iranian, bgs	lb.	.23	- —
Moroccan, bgs.	lb.	.31	- —
Turkish, bgs.	lb.	.27	- —
Cumin seed oil, bots., cns	lb.	15.50	-17.00
Cyanamide, fertilizer, mixing grade, 21% N, gran., bgs., Niagara Falls, Ont., contract.	ton.	57.00	- —
Fertilizer, pulv., 21% N, bgs., works	unit-ton.	2.85	- —
Cyanamide, fertilizer, indust. grade, bgs, c.l., works	ton.	75.00	- —
bgs., l.c.l., works	ton.	96.00	- —
Indust. grade, 6-16 mesh, dms., c.l., works	ton.	120.00	- —
dms., l.c.l., works	ton.	140.00	- —
Cyclohexane, 99%, tech., dms., c.l., dlvd. E. of Rockies	gal.	1.02	- —
dms., l.c.l., same basis	gal.	1.10	- —
dms., c.l., dlvd. W. of Rockies	gal.	.77	- —
dms., l.c.l., same basis	gal.	.85	- —
tanks, works	gal.	.55	- —
98%, tech., 40-dm. lots or more, f.o.b. works	gal.	.56	- —
5-39 dms., same basis	gal.	.60	- —
tanks, same basis	gal.	.36	- —
Cyclohexanol, tech., dms., c.l., works, frt. alld. E	lb.	.28½-	—
dms., l.c.l., works, same basis.	lb.	.29½-	—
tanks, works, same basis	lb.	.26	- —
Cyclohexanone, tech., dms., c.l., works	lb.	.33½-	—
dms., l.c.l., works	lb.	.34½-	—
tanks, works	lb.	.31	- —
	lb.	.49	- —
dms., l.c.l., works	lb.	.50	- —
tanks, works	lb.	.47	- —
Cypress oil, bots	lb.	5.30	- —

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2,4-D, tech., bgs., dms., c.l., works, frt. equald	lb.	.40	- —
tanks, dlvd. E.	lb.	.41	- —
bgs., dms., l.c.l., same basis	lb.	.45	- .49
2,4-D butyl ester, dms., c.l., works.	lb.	.43	- —
dms., l.c.l., same basis	lb.	.48	- .52
tanks, same basis	lb.	.42	- —
2,4-D isopropyl ester, dms., c.l., works	lb.	.43	- —
dms., l.c.l., works	lb.	.48	- .52
tanks, works	lb.	.42	- —
Dammar gum, Batavia, A/E, cs.	lb.	No stocks.	
East India, Batu, bold, bgs.	lb.	.15½-	.18
nubs and chips, bgs.	lb.	.09	- .10
black, bold, bgs	lb.	.15½-	.18
nubs and chips, bgs.	lb.	.12¼-	.13½
unscraped, bgs.	lb.	.13	- .14½
pale, chips, bgs.	lb.	.15	- .17
pale, nubs, bgs.	lb.	.20¾-	.24
Siam, cs.	lb.	.31½-	.34
Singapore, No. 1, bgs.	lb.	.34	- .40
No. 2, bgs.	lb.	.29	- .33
No. 3, bgs.	lb.	No stocks.	
dust, bgs.	lb.	.18	- .20
Dandelion root, bls	lb.	.35	- .40
DDD, tech., flake, grd., fib. dms., c.l., works	lb.	.45	- .47
fib. dms., l.c.l., works	lb.	.46	- .48

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DDT—Diethyl Toluamide

DDT, flake or lump, bgs., c.l., dlvd lb. .23 • —
bgs., smaller lots, same basis lb. .25 • —
fib, dms., c.l., same basis lb. .24 • —
fib, dms., smaller lots, same basis lb. .26 • —

Powdered DDT 1c. per pound higher.

DDVP (see Dimethyl dichlorovinyl phosphate).

l-Decanol, tech., dms., c.l., dlvd. E. lb. .43½- —
dms., l.c.l., dlvd. E. lb. .45½- —
Cyclohexylamine, dms., c.l., works.
Decyl alcohol, mixed isomers, dms., c.l., dlvd lb. .23½- —
dms., l.c.l., dlvd. lb. .25 • —
tanks, dlvd. lb. .21 • 2.00
Perfume grade, bots. lb. 1.00 • 2.00
Decyl alcohol, normal (see l-Decanol)
Deertongue leaves, bls. lb. .55 • .60
Defluorinated phosphate, feed grade, 14% P, paper bgs., c.l., t.l., Tupelo, Miss ton.57.07 • —
18% P, paper bgs., c.l., works. ton.66.25 .71.80
19% P, paper bgs., c.l., t.l., works, Houston, Tex ton.74.35 • —

Prices of defluorinated phosphate in bulk $3 per ton less than bg. c.l. prices.

Degras, common (15-17% free fatty acid), 400-lb. dms lb. .12 • .14
Neutral (over 2% free fatty acid), 400-lb. dms. lb. 13 • —

Denatured alcohol, ethyl, CD-12, CD-13, CD-14, CD-17, dms., c.l., dlvd. E. of Rockies. gal. .69½- —
dms., l.c.l., same basis gal. .74½- .80½
tanks, dlvd., same basis gal. .53½- —

Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.

Denatured alcohol, ethyl, proprietary solvent, dms., c.l., dlvd. E. of Rockies gal. .72 • —
dms., l.c.l., same basis gal. .77 • .83
tanks, same basis gal. .56 • —

Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.

Denatured alcohol, ethyl, SD1, dms., dlvd. E. of Rockies gal. .70½- —
dms., l.c.l., same basis gal. .75½- .81½
tanks, same basis gal. .54½- —
SD2B, dms., c.l., dlvd. E. of Rockies gal. .69 • —
dms., l.c.l., same basis gal. .74 • .80
tanks, same basis gal. .53 • —
SD3A, dms., c.l., dlvd. E. of Rockies gal. .68 • —
dms., l.c.l., same basis gal. .73 • .79
tanks, same basis gal. .52 • —
Denatured alcohol, ethyl, SD23A, dms., c.l., dlvd. E. of Rockies gal. .70½- —
dms., l.c.l., same basis gal. .75½- .81½
tanks, same basis gal. .54½- —
SD23H, dms., c.l., dlvd. E. of Rockies gal. .71 • —
dms., l.c.l., same basis gal. .76 • .82
tanks, same basis gal. .55 • —

Denatured alcohol, SD29, dms., c.l., dlvd. E. of Rockies gal. .69½- —
dms., l.c.l., same basis gal. .74½- .80½
tanks, same basis gal. .53½- —
SD30, dms., c.l., dlvd. E. of Rockies gal. .68 • —
dms., l.c.l., same basis gal. .73 • .79
tanks, same basis gal. .52 • —
Denatured alcohol, ethyl, SD-35A, dms., c.l., dlvd. E. of Rockies gal. .71 • —
dms., l.c.l., same basis gal. .76 • .82
tanks, same basis gal. .55 • —
SD-40, dms., c.l., dlvd. E. of Rockies gal. .70½- —
dms., l.c.l., same basis gal. .75½- .81½
tanks, same basis gal. .54½- —

For anhyd. alcohol on above formulas prices are 7c. per gal. higher.

West coast dlvd. prices are the same as eastern prices, except in Idaho, Montana, Oregon, and Washington where a 5c. differential on tankcars is maintained.

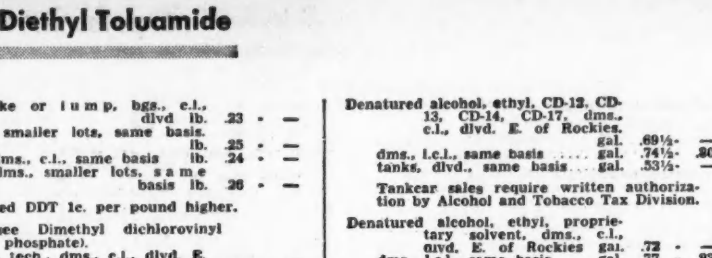
d-Desoxyephedrine hydrochloride, dms lb..15.00 -17.00
dl-Desoxyephedrine hydrochloride, dms lb. 6.50 • —
Dextrin, corn, gum, paper bgs., c.l., 100 lbs. 9.38 • —
paper bgs., l.c.l. 100 lbs. 9.53 • —
canary dark, paper bgs., c.l. 100 lbs. 9.22 • —
paper bgs., l.c.l. 100 lbs. 9.37 • —
indust. grade, 6-16 mesh, canary light, paper bgs., c.l. 100 lbs. 9.12 • —
paper bgs., l.c.l. 100 lbs. 9.27 • —
white, paper bgs., c.l. 100 lbs. 8.96 • —
paper bgs., l.c.l. 100 lbs. 9.11 • —

Corn dextrin in cotton bgs. 15c. per 100 lbs. higher.

Dextrose, anhyd., coml., bgs., c.l. 100 lbs. 8.65 • —
bgs., l.c.l. 100 lbs. 8.80 • —
Anhyd., special, aluminum foil lined fib. dms., 200-lb. dms. 100 lbs.14.70 • —
100-lb. dms. 100 lbs.15.20 • —
Hydrated, coml., bgs., c.l., ex whse. 100 lbs. 7.45 • —
bgs., c.l., ex whse. 100 lbs. 7.60 • —
USP, dms. lb. .19¾- —
Diacetone alcohol, acetone-free, dms., c.l., dlvd. lb. .15½- —
dms., l.c.l., dlvd. lb. .17 • —
tanks, dlvd. lb. .13 • —
Tech., dms., c.l., dlvd. lb. .15 • —
dms., l.c.l., dlvd. lb. .16½- —
tanks, dlvd. lb. .12½- —
Diacetyl, flavor grade, bots. lb. 4.30 • 4.55
Di-sec-amyl phenol, dms., c.l., works. lb. .32 • —
dms., l.c.l., works lb. .33 • —
tanks, works lb. .29½- —
Di-tert-amyl phenol, dms., c.l., works. lb. .32 • —
dms., l.c.l., works lb. .33 • —
tanks, works lb. .29½- —
Diallylamine, dms., c.l., dlvd. lb. .98½- —
dms., l.c.l., dlvd. lb. 1.00 • —
tanks, dlvd. lb. .96 • —
o-Dianisidine, dry, tech., fib. dms. lb. 2.00 • —
Dibenzyl sebacate, dms., c.l., works. lb. .93 • —
dms., l.c.l., same basis lb. .94 • —
tanks, same basis lb. .91 • —
Dibromobenzene, bgs., 500-lb. lots. lb. .55 • —
2,6-Di-tert-butyl-p-cresol, feed grade, c.l., t.l., dms., dlvd. lb. .65 • —
l.t.l., dms., same basis lb. .68 • —
Food grade, c.l., t.l., dms., dlvd. lb. .65 • —
dms., l.t.l., same basis lb. .68 • 1.10
Tech., dms., c.l., t.l., dlvd. lb. .57 • —
dms., l.c.l., same basis lb. .60 • —
tanks, same basis lb. .54 • —
Dibutyl fumarate, dms., c.l., t.l., dlvd. E lb. .31½- —
dms., l.c.l., l.t.l., dlvd. E lb. .33 • —
tanks, dlvd E lb. .29 • —
Dibutyl maleate, dms., c.l., t.l., dlvd. E lb. .31½- —
dms., l.c.l., l.t.l., dlvd. E lb. .33 • —
tanks, dlvd. E lb. .29 • —
Dibutyl phthalate, dms., c.l., dlvd. E lb. .31 • —
dms., l.c.l., same basis lb. .32½- —
tankcars, tanktrucks, 2,000 gals., same basis lb. .26 • —
tanktrucks, 1,000-1,999 gals., same basis lb. .26½- —
Dibutyl sebacate, dms., c.l., works. lb. .67½- —
dms., l.c.l., works lb. .68½- —
tanks, works lb. .65½- —
Dibutyl tartrate, dms., works, frt. alld lb. .65½- —
Dibutylamine, dms., c.l., dlvd lb. .55½- —
dms., l.c.l., same basis lb. .57 • —
tanks, same basis lb. .53 • —
Dicapryl phthalate, dms., c.l., dlvd. lb. .27½- —
dms., l.c.l., dlvd. lb. .29 • —
tanks, dlvd. lb. .25 • —
Dicapryl sebacate, dms., c.l., works. lb. .63 • —
dms., l.c.l., works lb. .63½- .64
tanks, works lb. .61 • —
2,5-Dichloroaniline, dms., works lb. .83 • —
3,4-Dichloroaniline, tech., solid, tanks, frt. alld lb. .73 • —
o-Dichlorobenzene, dms., c.l., frt. alld. E lb. .12¾- —
dms., l.c.l., same basis lb. .13¾- —
tanks, same basis lb. .11 • —
p-Dichlorobenzene, dms., c.l., f.o.b. works, frt. alld. E lb. .12 • —
dms., 2,000 lbs. or more same basis lb. .14½- —
1,4-Dichlorobutane, dms., c.l., or t.l., works lb. .33½- —
dms., l.c.l., or l.t.l., works lb. .34 • —
tanks, works lb. .32 • —
Dichlorodiphenyltrichloroethane (see DDT).
2,2-Dichloroethyl ether, dms., c.l., t.l., dlvd. E lb. .15½- —
dms., l.c.l., l.t.l., same basis lb. .17 • —
tanks, same basis lb. .13 • —
Dichloroisocyanuric acid, dms., c.l., t.l., frt. equald lb. .65 • —
dms., l.c.l., same basis lb. .75 • —
Dichloropentanes, dist., dms., c.l., works lb. .05 • —
dms., l.c.l., works lb. .06 • —
tanks, works lb. .03 • —
Dichlorophenoxyacetic acid (see 2,4-D).
Dicyclohexylamine, dms., c.l., works. lb. .54 • —
dms., l.c.l., works lb. .55 • —
tanks, works lb. .52 • —
Dicyclohexyl phthalate, gran., fib. dms., c.l., works, frt. alld. lb. .46½- —
fib. dms., l.c.l., same basis lb. .48 • —
Dicyclopentadiene, dms., c.l., f.o.b. works lb. .14½- —
dms., l.c.l., same basis lb. .14¾- —
tanks, same basis lb. .12 • —
Didecyl phthalate, dms., c.l., works. lb. .28½- —
dms., l.c.l., same basis lb. .30 • —
tankcars, tanktrucks, 2,000 gals. lb. .26 • —
tanktrucks, 1,000-1,999 gals, same basis lb. .26½- —
Dieldrin, dms., c.l., dlvd. lb. 1.85 • —
dms., l.c.l. dlvd. lb. 1.90 • —
Diethanolamine, dms., c.l., dlvd. E. lb. .27 • —
dms., l.c.l., same basis lb. .28½- —
tanks, same basis lb. .24½- —
Diethanolamine lauryl sulfate, dms., c.l., frt. alld lb. .27½- —
dms., l.t.l., frt. alld. lb. .28½- —
tanks, frt. alld. lb. .26½- —
Diethyl barbituric acid (see Barbital).
Diethyl carbonate, dms., c.l., f.o.b. works lb. .47½- —
dms., l.c.l., same basis lb. .48½- —
tanks, same basis lb. .45 • —
Diethyl ethanolamines, dms., c.l., dlvd lb. .69½- —
dms., l.c.l., dlvd. lb. .71 • —
tanks, dlvd. lb. .67 • —
Diethyl oxalate, dms., c.l., f.o.b. works lb. .42½- —
dms., l.c.l., same basis lb. .43½- —
tanks, same basis lb. .40 • —
Diethyl phthalate, dms., c.l., dlvd. lb. .27½- —
dms., l.c.l., dlvd. lb. .29 • —
tanktrucks, 1,000-1,999 gals, same basis lb. .26½- —
tankcars, tanktrucks, 2,000-lb. lots, same basis lb. .26 • —
Diethyl sulfate, dms., c.l., works lb. .19½- —
dms., l.c.l., works lb. .20½- —
tanks, works lb. .17½- —
Diethyl thiourea, dms., c.l., t.l., works lb. .58 • —
dms., l.c.l., same basis lb. .59 • —
Diethyl toluamide, 90-95% meta isomer dms., c.l., t.l., works. lb 2.30 • —
5-44 dm. lots, works lb 2.35 • —
1-4 dm. lots, works lb. 2.40 • —

Firemaster* T23P

Flame retardant for plastics



tris (2,3-dibromopropyl) phosphate

More halogen=more flame retardance. Michigan Chemical's Firemaster* T23P contains a high bromine content of 68.7% with 4.4% phosphorus. This imparts particularly efficient fire retardancy to expandable polystyrene and other styrene products, polyesters, phenolics, acrylic resins, PVC, epoxies and urethane foams. Because of its fundamental superiority, small quantities of Firemaster* T23P may suffice. Its clarity and light color usually preclude any problem of color carryover to end products. Firemaster* T23P is now available commercially in any quantity from pounds to carloads. Write today for technical data, samples, and prices.

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MICHIGAN CHEMICAL CORPORATION

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Eastern Sales Office: 230 Park Avenue, New York 17, New York

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N,N-Diethyl-m-toluidine, tech., liq., tanks, frt. alld. lb. .83 • —
Diethylamine, dms., c.l., divd. E. lb. .52 • —
dms., l.c.l., same basis lb. .53½- —
tanks, same basis lb. .49½- —
N,N-Diethylaniline, dms., c.l., frt. alld. lb. .57 • —
dms., l.c.l., same basis lb. .58 • —
tanks, same basis lb. .55 • —
Diethylbenzene, dms., t.l., frt. alld. lb. .16½- —
Di-2-ethylhexyl adipate (see Dioctyl adipate).
Di-2-ethylhexyl phthalate (see Dioctyl phthalate).
Diethylene glycol, dms., c.l., divd. E. lb. .17¾- —
dms., l.c.l., same basis lb. .19¼- —
tanks, same basis lb. .15½- —
Diethylene glycol diethyl ether, dms., c.l., works lb. .51½- —
dms., l.c.l., works lb. .52¼- —
Diethylene glycol monobutyl ether, c.l., dms., works lb. .30¾- —
dms., l.c.l., works lb. .32¼- —
tanks, divd. E. lb. .28¼- —
Diethylene glycol monobutyl ether acetate, dms., c.l., works. lb. .30¾- —
dms., l.c.l., works lb. .31½- —
tanks, divd. E. lb. .28¾- —
Diethylene glycol monoethyl ether, dms., c.l., divd lb. .22½- —
dms., l.c.l., divd. lb. .24 • —
tanks, divd. E. lb. .20 • —
Diethylene glycol monoethyl ether acetate, dms., c.l., works. lb. .27¼- —
dms., l.c.l., works lb. .28 • —
tanks, works lb. .25¼- —
Diethylene glycol monomethyl ether, dms., c.l., divd lb. .21 • —
dms., l.c.l., divd. lb. .22½- —
tanks, divd. E. lb. .18½- —
Diethylenetriamine, dms., c.l., divd. E lb. .44 • —
dms., l.c.l., divd. E. lb. .45½- —
tanks, divd. E. lb. .41½- —
Diethylstilbesterol, USP, bots., 10-kilo lots kilo. 100.00 -147.50
bots, 1-kilo lot kilo. 110.00 -152.50
Digitalis leaves, USP, dom., dms lb. 1.25 • —
Digitoxin, USP, bots. gram. 4.20 • —
Diglycol laurate, dms. lb. .32¼- .34
Diglycol stearate, dms., ton lots lb. .26 • .28
Diglycolic acid, bgs., c.l., t.l., works. lb. .15½- —
bgs., l.c.l., works lb. .16 • —
Dihexyl sebacate, dms., c.l., works. lb. .66 • —
dms., l.c.l., works lb. .67 • —
tanks, works lb. .64 • —
Dihydrazine sulfate, dms., works lb. 1.10 • 1.25
Dihydrostreptomycin sulfate, bulk. gram. .035 • .038
1,2-Dihydroxy anthraquinone, dms., works lb. 3.45 • —
2,2-Dihydroxy-3-5-dichloro-diphenyl-methane, pure, dms lb. 2.55 • —
Tech., dms., 20,000 lbs. or more lb. 1.11 • —
dms., 1,050 lbs. to 20,000 lbs. lb. 1.13 • —
dms., 150 lbs. to 1,050 lbs. lb. 1.15 • —
Di-isobutyl ketone, dms., c.l., divd. lb. .17 • —
dms., l.c.l., divd. lb. .18½- —
tanks, divd. lb. .14½- —
Di-isobutyl phthalate, dms., c.l., divd. E. lb. .31½- —
dms., l.c.l., same basis lb. .32½- —
tanks, same basis lb. .29 • —
Di-isobutylene, dms., c.l., divd. E lb. .10 • —
dms., l.c.l., divd. E. lb. .11½- —
tanks, divd. E. lb. .08 • —
Di-iso-octyl phthalate, dms., c.l., divd. lb. .28½- —
dms., l.c.l., same basis lb. .30 • —
tanktrucks, 1,000-1,999 gals., divd. lb. .26½- —
tankcars, tanktrucks, 2,000 gals., divd. lb. .26 • —
Di-iso-octyl sebacate, dms., c.l., works lb. .62 • —
dms., l.c.l., works lb. .62½- .63
tanks, works lb. .60 • —
Di-isopropanolamine, dms., c.l., divd. lb. .23¼- —
dms., l.c.l., same basis lb. .24¾- —
tanks, same basis lb. .20¾- —
Di-isopropylamine dms., c.l., divd. E. of Rockies lb. .50½- —
dms., l.c.l., same basis lb. .52 • —
tanks, same basis lb. .48 • —
Dillweed oil, dom., bots., dms. lb. 3.75 • —
Dimethyl anthranilate, cns. lb. 4.15 • —
Dimethyl dichlorovinyl phosphate, 55-gal. dms., divd lb. 3.50 • —
Dimethyl ethanolamines, anhyd., dms., c.l. divd lb. 1.225 • —
dms., l.c.l., divd. lb. 1.235 • —
tanks, divd. lb. 1.20 • —
70% dms., c.l., divd., 100% basis, contained amines lb. .68½- —
dms., l.c.l., divd., 100% basis. lb. .69½- —
tanks, divd., 100% basis lb. .66 • —
Dimethyl hydroquinone, dms. lb. 1.90 • 2.20
Dimethyl phthalate, dms., c.l., works lb. .28½- —
dms., l.c.l., works lb. .30 • —
tanktrucks, 1,000-1,999 gals., same basis lb. .26½- —
tankcars, tanktrucks, 2,000 gals., same basis lb. .26 • —
Dimethyl sebacate, dms., c.l., works. lb. 1.31 • —
dms., l.c.l., works lb. 1.30 • —
tanks, works lb. 1.28 • —
Dimethyl sulfate, ret. dms., c.l., works lb. .17½- —
ret. dms., l.c.l., works lb. .18½- —
tanks, works lb. .16½- —
Dimethyl sulfide, dms., c.l., works. lb. .18 • —
dms., l.c.l., works lb. .18½- —
tanks, works lb. .15 • —
Dimethylamine, 25% soln., dms., c.l., frt. equald, 100% basis lb. .38 • —
dms., l.c.l., frt. equald, 100% basis lb. .38½- —
tanks, frt. equald, 100% basis. lb. .28 • —
40% soln., dms., c.l., frt. equald, 100% basis lb. .35 • —
dms., l.c.l., frt. equald, 100% basis lb. .35½- —
tanks, frt. equald, 100% basis. lb. .26 • —
N,N-Dimethylaniline, dms., c.l., frt. alld. lb. .23 • —
dms., l.c.l., same basis lb. .29 • —
tanks, same basis lb. .25 • —
N,N-Dimethylformamide, dms., c.l., t.l., works lb. .32½- —
dms., l.c.l., works lb. .33 • —
tanks, works lb. .30 • —
2,4-Dinitroaniline, dms., frt. alld. lb. .75 • —
Dinitroaniline orange toner, CP, bbls., divd. E. of Rockies. lb. 1.56 • —
Dinitroaniline orange toner prices 1c high-er W. of Rockies.

m-Dinitrobenzene, 89°C., dms. lb. .28 • —
2,4-Dinitrochlorobenzene, crystallizing at 46½°C., dms., c.l., frt. alld. E. lb. .17¼- —
dms., l.c.l., frt. alld. E. lb. .17¾- —
tanks, frt. alld. E. lb. .17 • —
2,4-Dinitrophenol, bbls. lb. .41 • —
2,4-Dinitrotoluene, oil, dms. lb. .11 • —
Refd., 63°C., dms. lb. .23 • —
Dioctyl adipate, dms., c.l., works lb. .42½- —
dms., l.c.l., works lb. .43½- —
tanks, works lb. .40 • —
Dioctyl phthalate, dms., c.l., frt. alld lb. .28½- —
dms., l.c.l., frt. alld lb. .30 • —
tanktrucks, 1,000-1,999 gals., same basis lb. .25½- —
tankcars, tanktrucks, 2,000 gals., same basis lb. .25 • —
Dioctyl sebacate, dms., c.l., works. lb. .61¼- —
dms., l.c.l., works lb. .62¼- —
dms., l.c.l., works lb. .62¼ —
tanks, works, divd. lb. .59¼- —
1,4-Dioxane, dms., c.l., divd. E. lb. .31½- —
dms., l.c.l., divd. E. lb. .33 • —
tanks, divd. E. lb. .29 • —
Prices in the west are 2c. per lb. higher.
Dipentaerythritol, bgs., c.l., t.l., divd. E. lb. .40 • —
bgs., l.c.l., l.t.l., divd. E. lb. .41 • —
Dipentene, dest.-dist., dms., c.l., works gal. .58 • —
dms., l.c.l., works lb. .62 • —
dms., l.c.l., ex whse. gal. .78 • —
tankscars, works gal. .41 • —
Steam dist., dms., c.l., works, South gal. .72 • —
dms., l.c.l., divd. New York gal. .91 • —
tanks, works, South lb. .55 • —
Dip oil (see Tar acid oil).
Diphenolic acid, 1,000-lb. or more, bgs., works lb. .73 • —
Diphenolic polyether acids, 1,000-lb. or more, bgs., works lb. 1.60 • —
Diphenyl, bgs., c.l., t.l., works lb. .16¾- —
bgs., l.c.l., works lb. .18½- —
tanks, works lb. .15¾ —
Diphenyl oxide, perfume grade, cns. lb. .55 • .70
Diphenyl phthalate, dms., c.l., works. lb. .51¾- —
dms., l.c.l., works lb. .53¾- —
Diphenylamine, refd., flake, bgs., c.l., works, frt. equald lb. .31 • —
bgs., l.c.l., same basis lb. .33 • —
Refd., fused, tanks, same basis lb. .28 • —
Refd., diphenylamine in dms., ½c. per lb. higher.
Diphenylguanadine, bgs., dms., ton lots, frt. alld lb. .49 • —
bgs., smaller lots frt. alld lb. .50 • —
Diphenylhydantoin-sodium, USP, dms lb. 5.00 • 5.50
Dipropylene glycol, dms., c.l., frt. alld lb. .17 • —
dms., l.c.l., frt. alld. lb. .18½- —
tanks, frt. alld. lb. .14¼- —
Dipropylene glycol methyl ether, dms., c.l., divd. E. lb. .20 • —
dms., l.c.l., same basis lb. .21½- —
tanks, same basis lb. .18½- —
Dithiodibenzoic acid, dms., 1,000-lb. lots, works lb. 1.45 • —
Di-o-tolylguanidine, dms., ton lots, frt. alld lb. .69 • —
dms., smaller lots, frt. alld lb. .70 • —
Di-o-tolylthiourea, tech., solid, dms., c.l., t.l., frt. alld lb. .55 • —

Divinylbenzene, 20-25%, dms., c.l., works, frt equald lb. .20 • —
dms., l.c.l., same basis lb. .21 • —
tanks, same basis lb. .19 • —
50-60%, dms., c.l., works, 100% basis lb. 1.00 • —
dms., l.c.l., works, 100% basis. lb. 1.05 • —
tanks, same basis lb. .90 • —
Dodecenyl succinic anhydride, dms., c.l., t.l., divd. E. lb. .75 • —
dms. l.c.l., l.t.l., same basis lb. .76 • —
Dodecylbenzene, dms., c.l., f.o.b., works, frt equald lb. .134 • —
dms., l.c.l., same basis lb. .144 • —
tanks, same basis lb. .11 • —
Dodecylphenol, c.l., frt. alld. lb. .22 • —
dms., l.c.l., same basis lb. .23 • —
tanks, same basis lb. .19½- —
Dodecylphenol prices on shipments to Western States are 2c. per pound higher.
Dyes, coaltar, certified colors for food, drugs and cosmetics, 500-lb. and 1-lb. lots, divd.:
Blue, FD&C, No. 1 lb. 15.65 -17.60
No. 2 lb. 15.65 -17.60
Green, FD&C, No. 1 lb. 15.65 -17.60
No. 2 lb. 19.60 -22.85
No. 3 lb. 31.30 -35.90
Red, FD&C, No. 1 lb. 5.90 - 7.85
No. 2 lb. 3.30 - 4.10
No. 3 lb. 19.60 -22.85
No. 4 lb. 5.55 - 7.50
Violet, FD&C, No. 1 lb. 15.65 -17.60
Yellow, FD&C, No. 1 lb. 9.15 -11.05
No. 5 lb. 3.30 - 4.10
No. 6 lb. 3.30 - 4.10

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(SWEET MUSIC ABOUT ALIPHATIC AMINES)

Are you spending too much for aliphatic amines? You are — if your source isn't the Methylamines!

Check the low molecular weights and moderate prices of monomethylamine, CH_3NH_2; dimethylamine, $(CH_3)_2NH$; and trimethylamine, $(CH_3)_3N$. You'll see why they save you money.

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COMMERCIAL SOLVENTS CORPORATION
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IN CANADA: MacArthur Chemical Co. (1958) Ltd., Montreal • IN MEXICO: Comsolmex, S. A., Mexico 7, D. F.

Dyes—Ethyl Morphine Hydrochloride

Dyes, coaltar, certified colors for drugs and cosmetics, 200-lb. and 1-lb. lots, dlvd.:

Black, D&C, No. 1	lb.	10.50 -10.95
Brown, D&C, No. 1	lb.	15.65 -16.10
Green, D&C, No. 5	lb.	15.65 -16.10
No. 6	lb.	15.65 -16.10
No. 7	lb.	14.35 -14.80
Orange, D&C, No. 3	lb.	10.50 -10.95
No. 4	lb.	19.60 -20.05
No. 5	lb.	3.80 - 4.25
Red, D&C, No. 17	lb.	10.50 -10.95
No. 18	lb.	23.60 -24.00
No. 19	lb.	15.00 -15.45
No. 21	lb.	3.90 - 4.35
No. 22	lb.	10.50 -10.95
No. 28	lb.	24.15 -24.65
No. 33	lb.	17.00 -17.45
Violet, D&C, No. 2	lb.	15.65 -16.10
Yellow, D&C, No. 7	lb.	10.50 -10.95
No. 8	lb.	10.50 -10.95
No. 10	lb.	13.05 -13.50
No. 11	lb.	13.05 -13.50

Dyes, coaltar, certified colors for drugs and cosmetics, external use, 500-lb. and 1-lb. lots, dlvd.:

Blue, Ext., D&C, No. 1	lb.	15.65 -16.10
Green, Ext., D&C, No. 1	lb.	15.65 -16.10
Red, Ext., D&C, No. 1	lb.	13.05 -13.50
Yellow, Ext, D&C, No. 1	lb.	10.50 -10.95

Dyes, coaltar for general use in cloth dyeing (numbers are those of the Color Index scale or prototype), contract dlvd. No.

11110	Brilliant scarlet BN	lb.	1.79 • —
13390	Fast blue SR	lb.	1.43 • —
14025	Yellow 2G	lb.	1.26 • —
14030	Orange R, extra, conc.	lb.	1.64 • —
14645	Chrome black T	lb.	.77 • —
14720	Rubine XX, conc.	lb.	1.59 • —
15510	Orange Y, extra conc.	lb.	.83 • —
15575	Orange RR	lb.	.99 • —
15620	Fast Red A, conc.	lb.	1.61 • —
15705	Chrome blue black R, conc.	lb.	1.12 • —
16150	Scarlet 2RL	lb.	1.22 • —
16255	Brilliant scarlet 3RN, conc.	lb.	1.26 • —
16230	Fast light, orange 2G	lb.	1.39 • —
17590	Brown PG	lb.	3.00 • —
18050	Phloxine 2G	lb.	1.05 • —
18055	Fuchsine 6B	lb.	1.55 • —
18965	Fast yellow 2G	lb.	2.32 • —
19140	Yellow XX	lb.	2.48 • —
19555	Yellow NN, conc.	lb.	3.67 • —
20170	Brown Y	lb.	1.33 • —
20470	Blue black, extra, conc.	lb.	1.44 • —
21010	Brown, RX, conc.	lb.	1.35 • —
22240	Scarlet B	lb.	2.81 • —
22310	Red FC	lb.	1.57 • —
22311	Brown MCW	lb.	1.47 • —
22610	Blue 2B, extra conc.	lb.	1.53 • —
23500	Red, 4BX, conc.	lb.	1.80 • —
24410	Sky blue FF, extra, conc.	lb.	1.95 • —
24895	Brilliant yellow, conc.	lb.	3.27 • —

Dyes, coaltar for general use in cloth dyeing numbers are those of the Color Index scale or prototype), contract dlvd. No.

26360	Navy blue 3R, conc.	lb.	1.84 • —
26665	Black F, conc.	lb.	2.30 • —
26900	Milling Red 3R, conc.	lb.	2.24 • —
27075	Neutral black 2B, conc.	lb.	2.75 • —
27720	Gray L	lb.	2.18 • —
29185	Fast scarlet 4BNC	lb.	2.23 • —
30015	Diazo black VJ conc.	lb.	2.48 • —
30045	Yellow brown K, extra	lb.	1.26 • —
30235	Black EB, 200%	lb.	1.33 • —
30295	Green BY, conc.	lb.	1.07 • —
35660	Brown B	lb.	2.89 • —
37565	Naphthol SWF	lb.	1.85 • —
40000	Yellow 2G	lb.	1.44 • —
41000	Yellow OX	lb.	2.45 • —
42000	Green V, crystals	lb.	2.73 • —
42040	Brilliant green G crystals	lb.	3.62 • —
42090	Blue EG	lb.	1.85 • —
42100	Milling green 6B, conc.	lb.	4.78 • —
42640	Violet 4BXN	lb.	2.43 • —
43830	Brilliant blue, BBG	lb.	2.44 • —
44045	Blue B, extra conc.	lb.	3.61 • —
45170	Red BX	lb.	4.76 • —
50415	Nigrosine SSJ	lb.	1.03 • —
52015	Blue GXX	lb.	2.33 • —
58005	Alizarin red SC	lb.	3.64 • —
59700	Golden orange GFD, single paste	lb.	2.70 • —
59710	Flaming orange 6RD double powder	lb.	4.90 • —
59800	Dark blue BO, single paste.	lb.	2.28 • —
59825	Jade green NC supra, double paste	lb.	1.50 • —
61570	Alizarin green CG, extra	lb.	3.81 • —
63010	Alizarin blue SAPG	lb.	3.90 • —
63615	Alizarin blue black B	lb.	3.26 • —
69825	Blue BLFD double paste	lb.	2.82 • —
70800	Brown BR single paste	lb.	2.03 • —

Dyes, coaltar, oil-soluble, 100-lb. drums, dlvd. No.

12140	Oil scarlet RL	lb.	1.87 • —
12055	Oil orange 7078 V	lb.	1.38 • —
26120	Oil red N 1700	lb.	1.94 • —
42535B	Methyl violet base	lb.	1.86 • —
44045B	Victoria blue base	lb.	4.06 • —
50415B	Oil black 8603	lb.	.80 • —
61565	Alizarin cyanine green base.	lb.	6.13 • —
	Spirit black RB	lb.	3.89 • —
	Spirit brown GN	lb.	5.30 • —
	Spirit orange R conc.	lb.	5.87 • —
	Spirit red B conc.	lb.	6.41 • —
Pr. 517	Spirit yellow 2R conc.	lb.	4.62 • —
Pr. 554	Spirit blue THN	lb.	5.06 • —

E

Echinacea root, bls.	lb.	1.25 • —
Elm bark, grinding, bls.	lb.	.30 • .32
Powd., bbls., bxs	lb.	.60 • —
Select, bundles	lb.	.75 • —
Emetine hydrochloride, USP, bots.	oz.	48.40 • —
Endrin, tech., dms., 100-lbs. or more, 100% basis, dlvd.	lb.	2.70 • —
Eosin red toner, bbls., works	lb.	1.95 • —
Ephedrine, syn., USP, anhyd., bots. 100-oz. lots	oz.	.98 • 1.00
hydrous, bots., 100-oz. lots.	oz.	.92 • —
Ephedrine hydrochloride, NF, dms., 100-oz. f.o.b. works	oz.	.72 • —
Ephedrine sulfate, USP, cryst., dms., 100-oz. f.o.b. works	oz.	.73 • —
USP, powd., dms., 100-oz., same basis	oz.	.73 • —
Epichlorohydrin, dms., c.l., dlvd.	lb.	.29½- —
dms., l.c.l., dlvd.	lb.	.31 • —
tanks, dlvd.	lb.	.27 • —
l-Epinephrine base, syn., USP, bots., 100 gram. lots	gram.	.58 • —
Epsom salt (see Magnesium sulfate).		
Erigeron oil, cns.	lb.	11.00 • —
Ergot, NF, dms., tin-lined	lb.	1.00 • 1.25
Eserine salicylate, bots.	oz.	44.00 • —
Eserine sulfate, bots.	oz.	86.00 • —
Ester gum, gum-rosin type, dms., c.l., dlvd., Ill., Md., Ky., E. States, Minneapolis, N. C., Ohio, St. Louis, St. Paul, Va., W. Va.	lb.	.18½- —
Wood-rosin type, dms., c.l., same basis	lb.	.13½- —
Ether (see specific product).		
Ethyl acetate, nat., ferment, 85-88%, dms., c.l., dlvd.	lb.	.15 • —
dms., l.c.l., dlvd.	lb.	.16½- —
tanks, dlvd.	lb.	.12½- —
95-98%, dms., c.l., dlvd.	lb.	.15¼- —
dms., l.c.l., dlvd.	lb.	.16¾- —
tanks, dlvd.	lb.	.12¾- —
Ethyl acetate, nat., ferment, 99%, dms., c.l., dlvd.	lb.	.15½- —
dms., l.c.l., dlvd.	lb.	.17 • —
tanks, dlvd.	lb.	.13 • —
syn., 85-88%, dms., c.l., dlvd.	lb.	.15 • —
dms., l.c.l., dlvd.	lb.	.16½- —
tanks, dlvd.	lb.	.12½- —
Ethyl acetate, syn., 95-98%, dms. c.l., dlvd.	lb.	.15¼- —
dms., l.c.l., dlvd	lb.	.16¾- —
tanks, dlvd.	lb.	.12¾- —
99%, dms., c.l., dlvd.	lb.	.15½- —
dms., l.c.l., dlvd.	lb.	.17 • —
tanks, dlvd.	lb.	.13 • —
Ethyl acetoacetate, dms., c.l., dlvd.	lb.	58¼- —
dms., l.c.l., dlvd.	lb.	.60 • —
tanks, dlvd.	lb.	.56 • —
Ethyl acrylate, dms., c.l., t.l., dlvd.	lb.	.36 • —
dms., l.t.l., dlvd.	lb.	.37 • —
tanks, dlvd.	lb.	.34 • —
Ethyl alcohol, 190 pf., USP, tax paid dms, c.l., dlvd. E. of Rockies	gal.	20.63 • —
dms., l.c.l., same basis	gal.	20.73 -20.84
Ethyl alcohol, 190 pf., USP, tax-free, dms., c.l., dlvd. E. of Rockies	gal.	.68 • —
dms., l.c.l., same basis	gal.	.78 • .89
tanks, same basis	gal.	.52 • —
Ethyl alcohol, absolute, 200 pf., tax paid, dms., dlvd. E. of Rockies	gal.	21.73 • —
dms., l.c.l., same basis	gal.	21.85 -21.96
tanks, same basis	gal.	21.59 • —
Ethyl alcohol, denatured (see Denatured alcohol, ethyl).		
Ethyl aminobenzoate, USP (see Benzocaine).		
Ethyl amyl ketone, dms., c.l., dlvd.	lb.	.20 • —
dms., l.c.l., same basis	lb.	.21½- —
tanks, same basis	lb.	.17½- —
Ethyl benzoate, bots.	lb.	.75 • 1.00
Ethyl bromide, tech., 98%, dms., c.l., frt. alld. E.	lb.	.43 • —
dms., l.c.l., frt. alld. E.	lb.	.45 • —
tanks, frt. alld. E.	lb.	.41 • —
Ethyl butyl ketone, dms., c.l., t.l., works	lb.	.36 • —
dms., l.c.l., t.t.l., works	lb.	.36¾- —
tanks, works	lb.	.34 • —
Ethyl butyrate, dms., works	lb.	.85 • 1.00
Ethyl carbamate (see Urethane).		
Ethyl cellulose, vis. 7 cps., bgs., 5,000-lb. lots or more, frt. alld. E.	lb.	.73 • —
bgs., smaller lots, frt. alld. E.	lb.	.75 • —
Vis. 10, 20, 50, 100, 150 cps., bgs., 5,000-lb. lots or more, frt. alld. E.	lb.	.68 • —
bgs., smaller lots, frt. alld. E.	lb.	.70 • —
Ethyl chloride, tech., cyls., works.	lb.	.20 • .22
dms., works	lb.	.18 • .20
tanks, works	lb.	.10 • —
Ethyl cinnamate, cns.	lb.	3.35 • 3.50
Ethyl ethanolamies, mixed, dms., c.l., dlvd. E.	lb.	.43½- —
dms., l.c.l., dlvd. E.	lb.	.44½- —
tanks, dlvd. E.	lb.	.41½- —
Ethyl ether, absolute, ACS, dms.	lb.	.27 • —
Anesthesia, USP, dealers, 1-lb. cns.	lb.	1.01 • —
½-lb. cns	lb.	1.09 • —
¼-lb. cns.	lb.	1.21 • —
Indust., dms., c.l., dlvd.	lb.	.13½- —
dms., l.c.l., dlvd. E.	lb.	.15 • —
tanks, dlvd E.	lb.	.11 • —
2-Ethyl hexoic acid, dms., c.l., t.l., dlvd. E.	lb.	.37 • —
dms., l.c.l., l.t.l., dlvd. E.	lb.	.38½- —
tanks, dlvd. E.	lb.	.34½- —
2-Ethyl hexoic acid, 1c. higher W. of Rockies.		
2-Ethyl hexyl acrylate, dms., c.l., t.l., straight or mixed frt. alld. E.	lb.	.42½- —
dms., l.t.l., same basis	lb.	.43½- —
tanks, same basis	lb.	.40 • —
Prices of 2-ethylhexyl acrylate are 1½c. per lb. higher in Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.		
2-Ethylhexyl alcohol, dms., c.l., dlvd.	lb.	.23¾- —
dms., l.c.l. dlvd.	lb.	.25¼- —
tanks, dlvd.	lb.	.21¼- —
Ethyl iodide, cbys., works	lb.	3.30 • —
Ethyl methacrylate, dms., c.l., frt. equald.	lb.	.32 • —
dms., l.t.l., frt. equald.	lb.	.32½- —
tanks, frt. equald.	lb.	.30 • —
Ethyl morphine hydrochloride, USP, bots.	oz.	11.83 • —

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You save valuable time when you buy Epon resin solutions, because weighing, compounding, filtering, and standardizing are done for you right at the Shell Chemical plant.

Epon resin solutions come to you ready-to-use, with the solvent and solids content standardized. You save on handling time, too, because Epon resin solutions can be pumped with ordinary equipment. These solutions may be integrated into time-tested coating formulations, eliminating the need for costly experimentation in your own laboratories.

If you do not find the Epon resin solutions you need in the table, perhaps we can compound one to your exact requirements after we analyze your problem. Get complete information by phoning or writing your nearest Shell Chemical district office.

EPON RESIN SOLUTION	RESIN	SOLVENT	% SOLIDS
Epon 834-X-90	834	Xylene	90
Epon 836-C-75	836	MIBK	75
Epon 1001-A-80	1001	Acetone	80
Epon 1001-B-80	1001	MEK	80
Epon 1001-BT-70	1001	MEK/Toluene (50/50)	70
Epon 1001-CX-75	1001	MIBK/Xylene (65/35)	75
Epon 1001-T-75	1001	Toluene	75
Epon 1001-X-75	1001	Xylene	75
Epon 1007-CT-55	1007	MIBK/Toluene (50/50)	55

SHELL CHEMICAL COMPANY
PLASTICS AND RESINS DIVISION

Central District, 6054 West Touhy Avenue, Chicago 48, Illinois
East Central District, 20575 Center Ridge Road, Cleveland 16, Ohio
Eastern District, 42-76 Main Street, Flushing 55, New York
Western District, 10642 Downey Avenue, Downey, California

IN CANADA: Chemical Division, Shell Oil Company of Canada, Limited, Toronto

SHELL

Ethyl oenanthate, dms. lb. 1.08 - 1.30
Ethyl oxalate (see Diethyl oxalate).
Ethyl silicate, dist. (see Tetraethyl orthosilicate).
Ethyl silicate, 40% available SiO, dms., c.l., dlvd. lb. .44¼- —
dms., l.c.l., dlvd. lb. .46 - —
tanks, dlvd. lb. .42 - —
N-Ethyl-a-naphthylamine, dms., works. lb. 1.04 - —
N-Ethyl-m-toluidine, tech., liq., tanks, frt. alld. lb. .83 - —
N-Ethyl-o-toluidine, bbls. lb. .88 - —
Ethylamine (see Mono-, Di-, or Tri-)
N-Ethylaniline, dms., c.l., frt. alld. lb. .57 - —
dms., l.c.l., frt. alld. lb. .58 - —
tanks, frt. alld. lb. .55 - —
Ethylbenzene, 99%, dms., c.l., t.l., frt. equald. lb. .15 - —
dms., l.c.l., same basis lb. .17 - —
tanks, same basis lb. .12½- —
2-Ethylbutyl alcohol, dms., c.l., works lb. .30 - —
dms., l.c.l., works lb. .30¾- —
tanks, works lb. .28 - —
Ethylene, contract, refy. gate lb. .0475- .0525
Ethylene dibromide, dms., c.l., frt. equald lb. .30½- —
dms., l.c.l., frt. equald lb. .31½- —
tanks, frt. equald lb. .28½- —
Ethylene dichloride, dms., c.l., dlvd. lb. .11½- —
dms., l.c.l., same basis lb. .13 - —
tanks, same basis lb. .09 - —
Ethylene dichloride prices W. of Rockies, 1c. per lb. higher.
Ethylene glycol, indust., dms., c.l., dlvd. E. lb. .16 - —
dms., l.c.l., same basis lb. .17½- —
tanks, same basis lb. .13½- —
Ethylene glycol monobutyl ether, dms., c.l., dlvd. E. lb. .22 - —
dms., l.c.l., dlvd. E. lb. .23½- —
tanks, dlvd. E. lb. .19½- —
Ethylene glycol monoethyl ether, dms., c.l., dlvd. E. lb. .21 - —
dms., l.c.l., dlvd. E. lb. .22¼- —
tanks, dlvd. E. lb. .18½- —
Ethylene glycol monoethyl ether acetate, dms., c.l., dlvd. E. lb. .19¼- —
dms., l.c.l., dlvd. E. lb. .20½- —
tanks, dlvd. E. lb. .17 - —
Ethylene glycol monomethyl etner, dms., c.l., dlvd. E. lb. .21 - —
dms., l.c.l., dlvd. E. lb. .22½- —
tanks, dlvd. E. lb. .18½- —
Ethylene glycol monomethyl ether acetate, dms., c.l., dlvd. E. lb. .29 - —
dms., l.c.l., dlvd. E. lb. .29¾- —
tanks, dlvd. E. lb. .27 - —
Ethylene glycol monostearate, tripie pressed, dms. lb. .33 - .35
Ethylene oxide, dms., c.l., dlvd. E. lb. .21½- —
dms., l.c.l., dlvd. E. lb. .24½- —
tanks, dlvd. E. lb. .15½- —
Ethylene trichloride (see Trichloroethylene).
Ethylenediamine, 85-88%, dms., c.l., dlvd. E., 100% basis lb. .42 - —
dms., l.c.l., dlvd. E., 100% basis. lb. .43 - —
tanks, dlvd. E., 100% basis lb. .40 - —
lots and over lb. 6.75 - —
200-lb. lots and over lb. 7.00 - —
100-lb. lots and smaller lb. 7.30 - 7.40
Ethylvanillin, 100-lb. fib. dms., 500-lb. lb. .85 - 1.40
Eucalyptol, USP, cns., dms lb. .85 - 1.40
Eucalyptus oil, NF, rectified, 70-75%, dms. lb. .44 - .55
NF, rectified, 80-85%, dms. lb. .53 - .62
Eugenol, tech., dms lb. 1.45 - —
USP, dms. lb. 2.00 - —
Euphorbia herb, bls lb. .12 - .15

F

F salt, paste, tech. dms., works lb. 2.30 - —
Feldspar, 140-200 mesh, bulk, c.l., works ton. 19.50 - —
Feldspar in bags $3 per ton higher.
Fennel oil, sweet, USP, cns lb. 1.93 - 2.25
Fennel seed, Argentine, bgs lb. .16 - —
French, light, bgs lb. .16 - —
Indian, light, bgs lb. .17 - —
Rumanian, bgs. lb. .14 - —
Yugoslav, light, bgs lb. .16½- —
Fenugreek seed, Moroccan, bgs. lb. .08 - —
Ferric chloride, anhyd., tech., dms., c.l., works 100 lbs. 7.50 - —
dms., l.c.l., works 100 lbs. 8.50 - —
Indust., cryst., bbls., c.l., works. 100 lbs. 5.25 - 6.75
bbls., l.c.l., works 100 lbs. 5.75 - 7.25
42° Be., photo grade, cbys., c.l., works 100 lbs. 7.25 - 8.25
sewage grade, tanks, frt. equald. 100% basis 100 lbs. 4.00 - —
USP, cryst., dms., t.l., works lb. .08½- —
Ferric citrate, gran., dms lb. .86 - —
Ferric hypophosphite, NF, dms. lb. 3.45 - —
Ferric naphthenate, liq., 6% Fe, dms., frt. alld. lb. .28¼- —
Ferric oxalate, tech., gran., 50-lb. dm., f.o.b. works E. lb. .89 - —
Ferric oxides (see iron oxides).
Ferric phosphate, NF, soluble, gran. pearls, cs. lb. .72 - .75
Ferric pyrophosphate, NF VII, soluble, gran., pearls, dms. lb. .70 - —
Ferric resinate, 6¾% Fe., dms., ton lots, frt. ald. lb. .40¼- —
Ferric stearate, dms., c.l., frt. alld. lb. .39 - —
dms., l.c.l., frt. alld. lb. .40 - .44
Ferric sulfate, partly hydrated, bgs., c.l., works ton. 35.25 - —
bgs., l.c.l., works ton. 36.25 - 42.25
bulk, c.l., works ton. 33.25 - —
Ferric-ammonium citrate, brown, pearls, NF, gran., dms. lb. .63 - .68
Green pearls, USP XII, gran., dms. lb. .66 - .69
Ferric-ammonium oxalate, fine gran., dms. lb. .27½- .29½
Ferric-potassium oxalate, fine gran., dms. lb. .32½- .34½
Ferric-sodium oxalate, fine gran., dms. lb. .27½- .29½
Ferrous gluconate, USP, 200-lb. dm., frt. equald. lb. .96 - —
Ferrous sulfate, gran., bgs., c.l., works ton. 34.50 - —
bgs., l.c.l., dlvd. Metropolitan area 100 lbs. 3.35 - 4.25
bbls., c.l., works ton. 40.00 - —
bulk, c.l., works ton. 27.00 - —
USP, cryst., bbls., dms lb. .09½- .10
Fir balsam, Canada, bbls gal. 32.00 - 35.00
Oregon, bbls. gal. 3.40 - 4.64
Fir oil, Canada, cns gal. 1.75 - 2.50
Fish oil, refd., alkali, dms lb. .1250- .1300
Kettle-bodied, dms. lb. .1480- .1530
Light-pressed, dms. lb. .1100- .1150
tanks lb. .09½- —
Fishliver oil, nat., high potency, 100,000 to 1,500,000 A units per gram, dms. 1,000,000 units. .12 - —
Fishmeal, dom., menhaden, 60% protein, grd., bgs., Atlantic and Gulf coasts ton. 93.00 - 94.00
Fishscrap, dom., menhaden, dried, 60% protein, grd., bgs., Atlantic and Gulf coasts. ton. 89.00 - 90.00
Fleaseed (see Psyllium seed).
Folic acid, USP, bots., fib. dms., kilo lots or more gram. .30 - .44
10% feed grade, fib. dms., 3 kilos or more kilo. 30.00 - 44.00

Formaldehyde, 37% (inhibited, 12 to 15% methanol), USP, dms., c.l., dlvd. lb. .0685- —
tanks, dlvd. lb. .0430- —
Formaldehyde, methanol-free (uninhibited), tanks, dlvd. lb. .0375- —
Formic acid, 85%, cbys., c.l., works. lb. .1570- —
cbys., l.c.l., works lb. .1620- .1720
90%, cbys., c.l., works lb. .1625- —
cbys., l.c.l., works lb. .1675- .1775
Fringetree bark, bls lb. .65 - .70
Fumaric acid, tech., 250-lb. dms., c.l., frt. equald. lb. .23¼- —
dms., l.c.l., frt. equald lb. .24¾- —
Fumaric acid in bags ½c. per lb. less.
Furfural, dms., c.l., works lb. .13 - —
dms., l.c.l., works lb. .14 - —
tanks, dlvd. E lb. .12 - —
tanks, dlvd. W lb. .13 - —
Furfuryl alcohol, cns., works lb. .23 - —
dms., c.l., t.l., Newark, N. J. lb. .20½- —
dms., l.c.l., t.t.l., Newark, N. J. lb. .21½- —
dms., c.l., t.l., Memphis, Tenn. lb. .19 - —
dms., l.c.l., t.t.l., Memphis, Tenn. lb. .20 - —
tanks, Memphis, Tenn. lb. .175 - —
Fusel oil, refd., dms., c.l., dlvd. lb. .18 - —
dms., l.c.l., dlvd. lb. .19½- —
tanks, dlvd. lb. .15½- —

G

G salt, bbls., frt. alld., 100% basis lb. .73 - —
Gallic acid, NF, VII, bbls., 1,000-lb. lots lb. 2.00 - —
bbls., smaller lots lb. 2.02 - 2.22
Tech., bbls., 1,000-lb. lots lb. 1.78 - —
bbls., smaller lots lb. 1.80 - 2.00
Gamma acid, dry grd., bbls., frt. alld. lb. 1.75 - —
Gammapicoline (see g-picoline).
Garlic oil, dom., bots. oz. 4.73 - 6.05
Imp., bots. oz. 4.50 - 5.00
Gaultheria oil (see Wintergreen oil).
Gelatin, edible, 75 AOAC test, bbls., c.l., dlvd. lb. .55 - —
150 AOAC test, bbls., c.l., dlvd. lb. .64 - —
200 AOAC test, bbls., c.l., dlvd. lb. .70 - —
225 AOAC test, bbls., c.l., dlvd. lb. .74 - —
275 AOAC test, bbls., c.l., dlvd. lb. .82 - —
Gelsenium root, bls. lb. .30 - .35
Gentian root, bls. lb. .24 - —
Grd., bbls., bxs. lb. .30 - —
Powd., bbls., bxs. lb. .30 - —
Geraniol, extra, cns., dms. lb. 1.75 - 2.40
Soap grade, dms. lb. .90 - 1.75
Standard, cns., dms. lb. 1.65 - —
Synthetic, dms. lb. 1.30 - —
Geranium oil, Algerian, cns lb. 23.00 - —
Bourbon, cns. lb. 28.50 - —
Geranium oil, Turkish (see Palmarosa oil).
Geranyl acetate, cns. lb. 1.90 - 2.70
Synthetic, dms. lb. 1.45 - —
Ginger oil, dist., bots. lb. 11.50 - 14.00
Ginger oleoresin, NF, from African root, bots. lb. 4.25 - 5.00
NF, from Jamaican root, bots. lb. 7.75 - —
Ginger root, Cochin, bgs lb. .29 - —
Jamaican, No. 3, bgs lb. .28 - —
Nigerian, split, bgs lb. .16½- —
Sierra Leone, bgs lb. .25 - —
Glauber's salt (see Sodium sulfate).
Gluconic acid, tech., 50%, dms., c.l., t.l., f.o.b. works lb. .20 - —
dms., l.c.l., f.o.b. works lb. .21 - —
tanks, f.o.b. works lb. .17 - —
Glue, bone, extracted, dry bone, 86 jellygrams, bgs., c.l., dlvd. lb. .16 - —
131 jellygrams, bgs., c.l., same basis lb. .16½- —
164 jellygrams, bgs., c.l., same basis lb. .18½- —
191 jellygrams, bgs., c.l., same basis lb. .19½- —
222 jellygrams, bgs., c.l., same basis lb. .21 - —
Glue, bone, green, 40 jellygrams, bgs., c.l., same basis lb. .16 - —
86 jellygrams, bgs., c.l., same basis lb. .16 - —
115 jellygrams, bgs., c.l., same basis lb. .16½- —
Glue, bone, green, 135 jellygrams, bgs., c.l., same basis lb. .17½- —
164 jellygrams, bgs., c.l., same basis lb. .18½- —
180 jellygrams, bgs., c.l., same basis lb. .19½- —
200 jellygrams, bgs., c.l., same basis lb. .20½- —
Bone glue, l.c.l., prices 2c. higher.
Glue, hide, 70-94 jellygrams, bgs., c.l., dlvd. lb. .18 - —
95-149, bgs., c.l., dlvd lb. .19 - —
122-149, bgs., c.l., dlvd lb. .20½- —
150-177, bgs., c.l., dlvd lb. .22½- —
178-206, bgs., c.l., dlvd lb. .25 - —

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JEFFERSON CHEMICALS

Glue, hide, 207-236, bgs., c.l., dlvd.	lb.	.28 • —
237-266, bgs., c.l., dlvd.	lb.	.30½- —
267-298, bgs., c.l., dlvd.	lb.	.32½- —
299-330, bgs., c.l., dlvd.	lb.	.34½- —
331-362, bgs., c.l., dlvd.	lb.	.36½- —
363-394, bgs., c.l., dlvd.	lb.	.38 • —
395-427, bgs., c.l., dlvd.	lb.	.40 • —
428-460, bgs., c.l., dlvd.	lb.	.42 • —
461-494, bgs., c.l., dlvd.	lb.	.44 • —
495-529, bgs., c.l., dlvd.	lb.	.46 • —
Hide glue, l.c.l., prices 2c. higher.		
l-Glutamic acid, 99½%, fib. dms., 100-lb. lots, frt. alld.	lb.	1.80 • —
fib. dms., 25-lb. lots, frt. alld.	lb.	1.88 • —
l-Glutamine, bots., 1-9 kilo lots,	kilo.	150.00 -300.00
Bots., 50-kilo lots	kilo.	100.00 • —
Bots., 500-kilo lots	kilo.	75.00 • —
Glycerine, dom., nat., crude, saponification, 88%, tanks, dlvd.	lb.	.20½- —
nat., crude, soaplye, 80%, tanks, dlvd.	lb.	.18½- —
nat., refd., USP, CP, 99%, dms., c.l., dlvd.	lb.	.30⅞- —
dms., l.c.l., dlvd.	lb.	.31⅝- —
tanks, dlvd.	lb.	.29⅛- —
Glycerine, dom., nat., refd., USP, CP, 96%, dms., c.l., dlvd.	lb.	.30 • —
dms., l.c.l., dlvd.	lb.	.30¾- —
tanks, dlvd.	lb.	.28¼- —
nat., high gravity, dms., c.l., dlvd.	lb.	.30¾- —
dms., l.c.l., dlvd.	lb.	.31½- —
tanks, dlvd.	lb.	.29 • —
Glycerine, dom., syn., dms., c.l., dlvd.	lb.	.31 • —
dms., l.c.l., dlvd.	lb.	.31¾- —
tanks, dlvd.	lb.	.29¼- —
Imp., nat., crude, soaplye, 80%, c.l.f.	lb.	.17½- —
Glycine (see Aminoacetic acid).		
Glycerol (see Glycerine).		
Glycolic acid (see Hydroxyacetic acid).		
Glycolonitrile, 70%, aqueous, dms., c.l., t.l., works	lb.	.40 • —
dms., l.c.l., same basis	lb.	.42 • —
tanks, same basis	lb.	.39 • —
Glyoxal, 30%, dms., c.l., works	lb.	.20½- —
dms., l.c.l., works	lb.	.21¼- —
tanks, works	lb.	.18 • —
Golden seal root, NF, tested, bls.	lb.	3.10 • —
Gramicidin, 1 to 5 kilos, f.o.b. works,	gram.	4.70 • —
Grapefruit oil, dms.	lb.	4.25 • —
Graphite, amorp., powd., bgs., fib. dms., ex whse.	lb.	.06 • .09½
Cryst., 88-90%, powd., bgs., fib. dms., ex whse.	lb.	.19 • .21½
90-92%, powd., bgs., fib. dms., ex whse.	lb.	.21 • .24½
95-97%, powd., bgs., fib. dms., ex whse.	lb.	.29 • .31½
Flake, No. 1, 90-95%, bgs., fib. dms., ex whse.	lb.	.29 .31
No. 2, 90-95%, bgs., fib. dms., ex whse.	lb.	.29 • .31
Grease, white, choice all hog, tanks, dlvd.	lb.	.07⅝- Nom.
Yellow, tanks, dlvd	lb.	.05 • —
Grease oil, No. 1, dms., c.l.	lb.	.13¾- —
dms., l.c.l.	lb.	.14¾- .15¾
Extra winter, strained, dms., c.l.	lb.	.16¼- —
dms., l.c.l.	lb.	.17¼- .18¼
Prime, burning, dms., c.l.	lb.	.17¾- —
dms., l.c.l.	lb.	.18¾- .19¾

GREEN PIGMENTS
Green pigment quotations are listed individually. For example, prices on Green, chrome, may be found in the C's under Chrome green.

Grindelia robusta herb, bls.	lb.	.40 • —
Guaiacol, NF, cryst., dms., tins	lb.	2.10 • 2.15
NF, liq., cbys., dms.	lb.	2.30 • 2.40
Guaiacol carbonate, NF VII, dms	lb.	3.40 • 3.45
Guaiacwood oil, cns.	lb.	.65 • .80
Guar gum, food grade, bgs., c.l.	lb.	.38 • —
bgs., 5,000 lbs or more	lb.	.39 • —
Indust., bgs., c.l.	lb.	.32 • —
Tech grade, bgs.	lb.	.30 • .33

GUMS
Gum quotations are listed individually. For example, prices on Gum, Dammar, may be found in the D's under Dammar gum.

H

H acid, dry, bbls., c.l., frt. alld., 100% basis	lb.	.90 • —
bbls., l.c.l., same basis	lb.	.95 • —
Hansa yellow, 10 G, bbls., dlvd. E. of Rockies	lb.	2.45 • —
Hansa G yellow, pigment, bbls.	lb.	2.20 • —
Hawthorn berries, bgs.	lb.	.18 • .20
Heliotropin, 100-lb. lots, dms.	lb.	2.60 • 3.40
Hellebore root, dom., green, bls.	lb.	.70 • .75
Helonias root, bls.	lb.	1.50 • —
Hemlock oil, cns.	lb.	2.55 • 3.00
Henbane leaves, bls.	lb.	.40 • .45
Heptachlor, dms., c.l., t.l., frt. alld., 100% basis	lb.	.96 • —
Heptane, indust., tankcars, New Jersey and New York	gal.	.20 • —
Houston, Texas	gal.	.1625- —
Hesperidin, purif., 100-lb. fib. dms., f.o.b., works	lb.	8.95 • —
Hesperidin methylchalcone, bots., 50-lb. lots, works	lb.	22.50 • —
bots., 5-lb. lots, works	lb.	23.00 • —
bots., 1-lb. lots, works	lb.	23.50 • —
Hexachlorophene, dms., 1,100 lbs. or more	lb.	1.84 • —
dms., to 1,100 lbs.	lb.	1.94 • —
Hexalin (see Cyclohexanol).		
Hexamethylenetetramine, tech., bgs., 20,000-lb. lots or more, Perth Amboy or New York City	lb.	.233 • —
Hexamethylenetetramine, tech., bgs., 1,000-19,999-lb. lots, same basis	lb.	.243 • —
bgs., smaller lots, same basis	lb.	.253 • —
fib. dms., 1,000-lb. lots or more, same basis	lb.	.250 • —
fib. dms., smaller lots, same basis	lb.	.253 • —
Hexamethylenetetramine, USP, bgs., 500 lbs. or more, f.o.b. Fords, N. J., dlvd. New York City and Philadelphia	lb.	.42½- —
bgs., smaller lots, same basis	lb.	.43½- .48¼
Hexane, industrial, tankcars, New Jersey and New York	gal.	.20 • —
Houston, Texas	gal.	.16 • —
l-Hexanol, dms., c.l., works	lb.	.35 • —
dms., l.c.l., works	lb.	.35¾- —
tanks, works	lb.	.33 • —
Hexyl cinnamic aldehyde, dms.	lb.	4.00 • 7.50
n-Hexyl methacrylate, dms., c.l., works	lb.	.75½- —
dms., l.c.l., works	lb.	.76 • —
Hexyl salicylate, dms.	lb.	1.75 • —
Hexylene glycol, dms., c.l., dlvd.	lb.	.17½- —
dms., l.c.l., dlvd.	lb.	.19 • —
tanks, dlvd.	lb.	.15 • —
Hexylresorcinol, USP, dms., 25-lb. lots or more, dlvd.	lb.	14.00 • —
dms., smaller lots, dlvd.	lb.	14.50 • —
Homatropine hydrobromide, USP,	bots oz.	3.25 • —
Homatropine methylbromide, USP,	bots oz.	3.25 • —
Hoofmeal, 17-18% ammonia, bulk, c.l., Chicago	unit-ton.	6.75 • —
Horehound herb, bls.	lb.	.18 • .20
Hydrastis (see Goldenseal).		
Hydrazine hydrate, 85% ret. dms., works	lb.	1.35 • 1.55
100%, ret. dms., works	lb.	1.60 • 1.90
Hydriodic acid, purif., 47%, 2-cbys., f.o.b. works	lb.	2.92 • —
Hydroabietyl alcohol, tech., solid, dms., c.l., dlvd. zone 1	lb.	.29¼- —
dms., l.c.l., dlvd. zone 1	lb.	.29¾- .30¼
tanks, dlvd. zone 1	lb.	.27¼- —

Zone 1 for hydroabieyl alcohol comprises all of continental US except Ariz., Calif., Colo., Idaho, Mont., Nev., N. M., Ore., Utah, Wash., Wyo., and the western part of Texas.

Hydrobromic acid, medicinal, 48%, cbys., frt. equald.	lb.	.48 • .56
Hydrochloric acid, anhyd. (see Hydrogen chloride).		
Hydrochloric acid, 18°, cbys., c.l., works 100 lbs.		2.50 • —
cbys., l.c.l., dlvd. Metropolitan area 100 lbs.		2.90 • 3.05
tanks, works, frt. equald	ton.	28.00 • —
20°, cbys., c.l., works 100 lbs.		2.75 • —
cbys., l.c.l., dlvd. Metropolitan area 100 lbs.		3.15 • —
tanks, works, frt. equald	ton.	30.00 • —
Hydrochloric acid, 22°, cbys., c.l., works 100 lbs.		3.25 • —
cbys., l.c.l., dlvd. Metropolitan area 100 lbs.		3.65 • —
tanks, works, frt. equald	ton.	35.00 • —
Hydrochloric acid, CP, USP, consumers, cbys., extra, c.l., works	lb.	.15¾- —
cbys., l.c.l., same basis	lb.	.17¼- .17¾
Hydrochloric acid, 5-pint bots., extra cs., c.l., same basis.	lb.	.20¾- —
Hydrocortisone acetate, bulk, bots., kilo lots or more	gram.	1.10 • 1.90
Hydrocortisone alcohol, bulk, bots., kilo lots or more	gram.	1.15 • 1.90
Hydrocyanic acid, dilute, NF, 2%, 5-pt. bots., f.o.b. works	pt.	.70 • —
Hydrofluoric acid, anhyd. (see Hydrogen fluoride).		
Hydrofluoric acid, aqueous, 70%, 55-gal. or 30-gal. dms., c.l., t.l., dlvd.	100 lbs.	19.25 • —
55-gal. dms., l.c.l., l.t.l., dlvd.	100 lbs.	20.75 • —
20-gal. dms., c.l., t.l., dlvd.	100 lbs.	21.00 • —
20-gal. dms., l.c.l., l.t.l., dlvd.	100 lbs.	22.50 • —
tanks, works frt. equald.	100 lbs.	13.40 • —

Delivered prices apply to all states east of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Washington and Wyoming. In those states add $2.70 per cwt. for drum delivery.

Hydrofluosilicic acid, dms., works, 30% basis	lb.	.06 • —
Hydrofuramide, dms., fib. ctns., works	lb.	.30 • .40
50-lb. cyls., l.c.l., works	lb.	.55 • .60
Hydrogen chloride, anhyd., 50-lb. cyls., l.c.l., works	lb.	.45 • —
Hydrogen cyanide, liq., 98%, tanks, works	lb.	.14 • —
Hydrogen fluoride, anhyd., cyls., dlvd. E	lb.	.30½- .32½
cyls., dlvd W.	lb.	.39 • —
tanks, works	lb.	.18 • —

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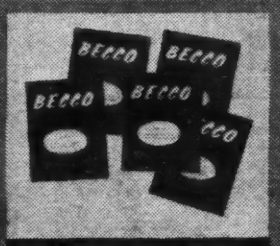

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SODIUM CARBONATE PEROXIDE—for compounding detergents and adhesives.

SODIUM PERBORATE—for use in dyestuff development, detergents, tooth-powders; as a mild bleaching agent and cold wave neutralizer.

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Hydrogen peroxide, 35%, dms., c.l., dlvd. lb. .202 - —
dms., l.c.l., dlvd. lb. .211 - —
tanks, dlvd. lb. .1800- —
Hydroquinone, photo grade, dms., 50-lbs., f.o.b. works lb. 1.10 - —
Tech., dms., c.l., dlvd. lb. .82½- —
dms., l.c.l. dlvd. lb. .84½- —
Hydroquinone monomethyl ether, dms., t.l., dlvd lb. 2.59 - —
dms., l.t.l., dlvd. lb. 2.61 - —
Hydroxyacetic acid, tech., 70% dms. Philadelphia and Chicago lb. .11 - —
tanks, Belle W. Va. lb. .073 - —
Hydroxycitronellol, cns. lb. 4.85 - 5.75
Hydroxyethyl cellulose, add grades, fib. dms., 20,000-lb. lots or more, f.o.b shipping point lb. .84 - —
fib. dms., 2,000 to 19,999-lb. lots, same basis lb. .89 - —
fib. dms., 100 to 1,999-lb. lots, same basis lb. .93 - —
fib dms., smaller lots, same basis lb. 1.03 - —
Hyoscine salts (see Scopolamine).
Hyoscyamine hydrobromide, bots. oz. 7.00 - —
Hyoscyamine sulfate, bots. oz. 7.00 - —
Hypophosphorous acid, purif., 50%, 10-cbys., f.o.b. works lb. 1.95 - —
NF, 50%, 10-cbys., same basis lb. 1.35 - —

I

Ichthammol, NF, dms. lb. .75 - 1.05
Indigo (see Dyes, coaltar, 1171 indigo, syn.)
Indole, CP, bots. lb. 13.75 -15.00
Inositol, 50-100 lb. dms., 1,000 lbs. or more, dlvd lb. 4.50 —
Inositol, 50-lb. lbs., less than 1,000 lb., dlvd lb. 4.75 - —
10 lb. cns., 10-50 lbs., dlvd. lb. 5.00 - —
5 lb. bots., dlvd. lb. 5.25 - —
Insect flowers (see Pyrethrum).
Iodine, crude, kgs. lb. .95 - —
Resub., USP, dms., f.o.b. works lb. 2.00 - 2.02
Iodochlorohydroquinolin, USP, dms. lb. 3.60 - —
Iodoform, NF, dms., 300-lbs., f.o.b. works lb. 4.90 - —
dms., 100-lbs., same basis lb. 5.05 - —
a-Ionone, cns. lb. 4.60 5.75
b-Ionone, cns. lb. 4.15 6.15
Ipecac root, whole, bgs. lb. 8.00 8.50
Powd., bbls., bxs. lb. 9.50 -10.00
Irish moss, bleached, prime, bls lb. .25 - .27
Iron blue, alkali-resisting, bbls., c.l., dlvd. E lb. .57 - —
bbls., l.c.l. ton lots, same basis. lb. .58 - —
bbls., smaller lots, same basis. lb. .59 - —
Dom., reg., bbls., c.l., dlvd. E lb. .52 - —
Iron blue, alkali-resisting dom., reg., bbls. l.c.l., ton lots, same basis lb. .53 - —
bbls., l.c.l., smaller lots, same basis lb. .54 - —
Imp., British, reg., bbls. c.l., dlvd. E lb. .48 - —
bbls., l.c.l., ton lots, same basis lb. .49 - —
bbls., l.c.l., smaller lots, same basis lb. .50 - —

Iron blue dlvd. prices 1c. higher for Pacific Coast states: Wash., Ore., Cal., N. M., Ariz., Mont., Wyo., Utah, Col. and Nev.

Iron compounds (see Ferric or Ferrous).
Iron oxide, black, pure, bgs., c.l., works lb. .14¾- —
bgs., l.c.l., works lb. .15 - —
Iron oxide, brown, pure, bgs., c.l., works lb. .14¼- —
bgs., l.c.l., works lb. .14½- —
Iron oxide, metallic, brown, bgs., works lb. .05¼- —
Iron oxide, Persian Gulf, red., bgs., c.l., works lb. .08¾- —
Iron oxide, red, dom., pure, bgs., Bethlehem, E. St. Louis, New York City lb. .14¼- —
Iron oxide, red, nat., 75-85% ferric oxide, bgs., c.l., works lb. .06¼- —
bgs., l.c.l., works lb. .06½- —
Iron oxide, Spanish red, bbls., c.l., ex dock lb. .05¾ Nom.
bbls., l.c.l., ex dock lb. .06 Nom.
bbls., l.c.l., ex whse, New York. lb. .06½ Nom.
Iron oxide, yellow, nat., French type, bgs., c.l., works lb. .06¼- —
Peruvian type, bgs., l.c.l lb. .023 - .024
Iron oxide, yellow, pure, light lemon shade, bgs., c.l., works lb. .12¼- —
Other shades, same basis lb. .12 - —
Isoamyl alcohol, dms., c.l., works, frt. alld E lb. .27½- —
dms., l.c.l., same basis lb. .29 - —
tanks, same basis lb. .25 - —
Isoborneol, cns. lb. 1.44 - 1.80
Isobornyl acetate, cns. lb. .46 - .56
Isobornyl formate, dms. lb. 1.20 - —
Isobornyl proprionate, dms. lb. 1.25 - 1.35
Isobutyl acetate, perfume grade, cns lb. .35 - —
Isobutyl acetate, solvent grade, dms., c.l., dlvd. E. of Rockies lb. .15¼- —
dms., l.c.l., same basis lb. .16¾- —
tanks, same basis lb. .12¾- —
Isobutyl alcohol, dms., c.l., dlvd lb. .15½- —
dms., l.c.l., dlvd. lb. .17 - —
tanks, dlvd. lb. .13 - —
Isobutylene, 99%, tanks, works gal. .38 - —
Isobutyl isobutyrate, dms., f.o.b. works lb. .75 - —
Isobutyraldehyde, CP, dms., c.l., dlvd lb. .27½- —
dms., l.c.l., dlvd. lb. .28½- —
Tech., dms., c.l., dlvd. lb. .22 - —
dms., l.c.l., dlvd. lb. .23 - —
tanks, dlvd. lb. .19½- —
Isobutyronitrile, dms., c.l., dlvd lb. .52 - —
dms., l.c.l., same basis lb. .57 - —
Isobutyric acid, dms., c.l., t.l., dlvd. lb. .35 - —
dms., l.c.l., t.t.l., same basis lb. .36½- —
t.c. t.t., same basis lb. .33 - —
Isoeugenol, cns. lb. 3.40 - 4.25
Isoniazid, powd., bulk, kilo or more kilo. 18.00 - —
Isonicotinic acid, 100-lb. fib. dms., works lb. 4.25 - —
Isonicotinic acid hydrazide (see Isoniazid).
Iso-octyl alcohol, dms., c.l., dlvd. E. lb. .23½- —
dms., l.c.l., dlvd. E. lb. .25 - —
tanks, dlvd. E. lb. .21 - —
Isopentane, com'l. grade, tanks, f.o.b. Tex. refy. gal. .16½- —
Isophorone, dms., c.l., works lb. .24½- —
dms., l.c.l., works lb. .25¼- —
tanks, works lb. .22½- —
Isophthalic acid, dms., c.l., works, frt. equald lb. .18 - —
dms., l.c.l., same basis lb. .19 - —
Isopropanol (see Isopropyl alcohol).
Isopropyl acetate, dms., c.l., dlvd. lb. .14 - —
dms., l.c.l., same basis lb. .15½- —
tanks, same basis lb. .11½- —
Isopropyl alcohol, refd., 91%, dms., c.l., dlvd gal. .58 - —
dms., l.c.l., dlvd. gal. .68 - —
tanks, dlvd. gal. .42 - —
Isopropyl alcohol, refd., 95%, c.l., dms., dlvd gal. .60 - —
dms., l.c.l., dlvd. gal. .70 - —
tanks, dlvd. gal. .44 - —
anhyd., c.l., dlvd. gal. .62 - —
dms., l.c.l., dlvd. gal. .72 - —
tanks, dlvd. gal. .46 - —

Isopropyl benzene (see Cumene).
Isopropyl ether, dms., c.l., dlvd. lb. .09¼- —
dms., l.c.l., dlvd. lb. .11 - —
tanks, dlvd. lb. .07 - —
Isopropyl-N-(3-chlorophenyl) carbamate (CIPC) tech., dms., c.l., t.l., works lb. 1.00 - —
dms., l.c.l., works lb. 1.05 - 1.25
tanks, works lb. .99 - —
Isopropylamine (see Mono, Di, or Tri-).
Isopropyl-N-phenyl carbamate, 450-lb. fib. dms., c.l., t.l., works lb. .75 - —
450-lb. fib. dms., l.c.l., works lb. .80 - .90
Isoquinoline, dms., works lb. .65 1.25
Itaconic acid, refd., bgs., c.l., f.o.b. works lb. .53½- —
bgs., l.c.l., same basis lb. .54½- —
Tech., bgs., c.l., same basis lb. .38½- —
bgs., l.c.l., same basis lb. .39½- —

J

J acid, paste, bbls., works, 100% basis lb. 2.70 - —
Powd., bbls., same basis lb. 2.75 - —
Jalap root, NF, bls. lb. .60 - —
NF, powd., bbls., bxs. lb. 70 - .75
Japan wax, cs. lb. .29 - .31
Juniper berries, bgs. lb. 16 - 17
Juniper berry oil, NF, bots. lb. 2.90 - 3.75
Twice rectified, bots. lb. 3.25 - —
Juniper tar oil, NF, dms. lb. .42 - .60
Juniper wood oil, tech., cns. lb. .38 - .55

K

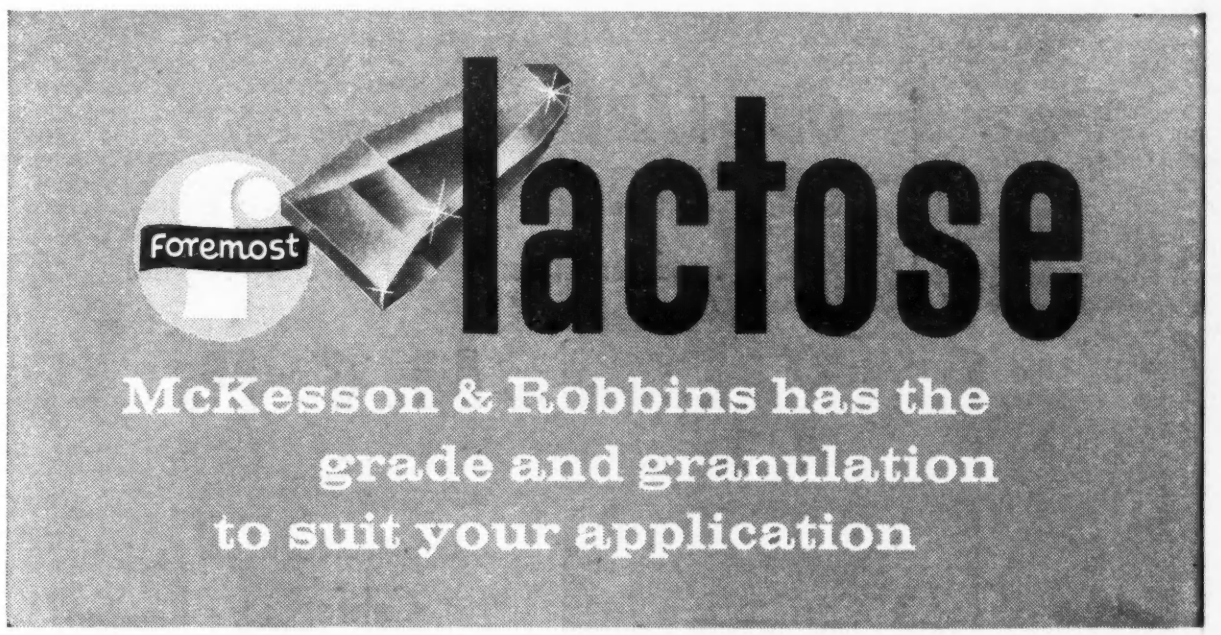
Kaolin (see also Clay, China).
Kaolin, NF, powd., fib. dms. lb. .10 - .12
NF, colloidal, 50-lb. bgs. lb. .15½- .17½
Karaya gum, No. 1, NF, powd., bls lb. .48 - .50
No. 2, powd., bbls. lb. .43 - .45
No. 3, powd., bbls. lb. .37 - .40
Koch acid, bbls., frt. alld., 100% basis lb. 1.00 - —
Kola nuts, bgs. lb. .13 - .15

L

L acid, bbls., works lb. 1.25 - —
Lacquer diluent, petroleum, 140°F. 200°F. b.r., tankcars, New Jersey and New York gal. .20 - —
Group 3 gal. .15125- —
Houston, Texas gal. .16 - —
Lacquer diluent, petroleum, 200°F. 240°F b.r., tankcars, New Jersey or New York gal. .20 - —
Group 3 gal. .14125- —
Houston, Texas gal. .16 - —
Lactic acid, edible, 50%, bbls. dms., c.l., frt. equald lb. .1985- —
bbls., dms., 20 or more, frt. equald lb. .2035- —
bbls., dms., 5 to 19, frt. equald. lb. .2085- —
bbls., dms., 1 to 4, frt. equald. lb. .2135- —
Lactic acid, edible, 80%, bbls., c.l., dms., frt. equald lb. .3335- —
bbls., dms., 20 or more, frt. equald. lb. .3385- —
Lactic acid, edible, 80%, bbls., dms., 5 to 19, frt. equald lb. .3435- —
bbls., dms., 1 to 4, frt. equald. lb. .3485- —
Plastic grade, 50%, c.l., bbls., works lb. .2740- —
bbls., 20 or more, works lb. .2790- —
bbls., 5 to 19, works lb. .2340- —
bbls., 1 to 4, works lb. .2890- —
80%, bbls., c.l., works lb. 4625- —
bbls., 5 to 19, works lb. 4725- —
bbls., 1 to 4, works lb. 4775- —
Tech., 44%, bbls., c.l., works. 100 lbs. 12 45 - —
bbls., l.c.l., works 100 lbs. 12.85 - —
USP, 85%, cbys. lb. .85 - —
Lactose, crystalline, edible, bgs., 23,000-lb. lots, frt. equald lb. .14 - —
bgs., 6,000-lb. lots, frt. equald lb. .14½- —
bgs., 2,000-lb. lots, frt. equald lb. .14¾- —
bgs., 200-lb. lots, frt. equald lb. .15¼- —
Edible lactose in fib. dms., ½c. higher.
Lactose, ferment, grade, bgs., c.l., works lb. .08½- —
Lactose, USP, reg., fib. dms., 30,000-lb. lots, frt. equald lb. .21½- —
fib. dms., 2,000-lb. lots, frt. equald lb. .22¼- —
200-1,880-lb. lots, frt. equald lb. .22¾- —

USP lactose in bags ½c. to 1c. lower.

Lactose, USP, spray dried, bgs., t.l., frt. equald lb. .18½- —
bgs., l.t.l., frt. equald lb. .19 - .19¾



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- Lactose Edible
- Crude Milk Sugar
- Lactose Fermentation Grade

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Lady's slipper root, bls. lb. 3.00 - 3.50
Lamp black, bgs., c.l., works lb. .16 - .45
Lanolin, USP, anhyd., 400-lb. dms., works lb. .24 - .26
USP, annyd., cosmetic, 400-lb. dms., works .20
USP, hydrous, 400-lb. dms., w lb. .20 - —
Lard, cash, dms., Chicago —
Lard oil (see Grease oil).
Larkspur seed, bgs. lb. .55 - —
Laurel leaf oil, dms., cns. lb. 9.75 - 12.50
Laurent's acid, bbls lb. .70 - —
Lauric acid, pure, dms. lb. .33½- .36¼
tanks lb. .32¾- —
Lauryl alcohol, bots. lb. 2.00 - 2.50
n-Lauryl methacrylate, dms., c.l., t.l., works lb. .65½- —
dms., l.t.l., works lb. .66 - —
Lavandin oil, 22-24%, dms. lb. 1.10 - 1.50
Abrial, dms. lb. 1.00 - 1.50
Lavender flowers, medium, bls lb. .55 - .60
Ord., bls. lb. .20 - .25
Select., bls. lb. .90 - 1.00
Lavender flower oil, USP, French, 35-37% ester, cns lb. 1.85 - 4.00
40-42% ester, cns. lb. 5.00 - 7.75
Spike, Spanish, cns. lb. 2.20 - 3.00
Lead acetate, NF, cryst., gran., powd., bbls lb. .34½- —
White, cryst., bbls. lb. .25½- —
gran., bbls. lb. .26½- —
powd., bbls. lb. .26½- —

Lead arsenate, acid powder, dealers, 3-50-lb. bgs. or any quantity, frt. alld. on $150 or more lb. .30¼- —
1-lb. bgs., same basis lb. .47 - —
Lead, blue, basic sulfate, bbls., c.l., shipt. point, frt. alld lb. .17 - —
bbls., l.c.l., same basis lb. .18 - —
Lead carbonate (see Lead, white, basic carbonate).
Lead chloride, dms. lb. .52 - —
Lead iodide, NF, V jars lb. 3.82 - —
Lead linoleate fused, 26% Pb, dms. lb. .38 - —
Lead metal prime, pigs, New York. lb. .12 - —
St. Louis lb. .1180- —
Lead monosilicate, bgs., c.l., works, frt. equald lb. .1385- —
bgs., l.c.l., same basis lb. .1485- —
Lead naphthenate, liq., 16% Pb., dms., dlvd lb. .19½- —
24% Pb., dms., dlvd. lb. .24¼- —
Solid, 37% Pb., dms., dlvd. lb. .31¾- —
Lead nitrate, bbls. lb. .24¼- .26¾
Lead orthosilicate gel., 50-60% PbO, dms., works lb. .29¾- .34¼
Lead peroxide, tech. powd., bbls lb. .45 - .50
Lead phthalate, dibasic, dms., works. lb. .41 - —
Lead, red, 95% Pb_3O_4 or less, bbls., c.l., works, frt. equald. lb. .1475- —
bbls., l.c.l., same basis lb. .1575- —

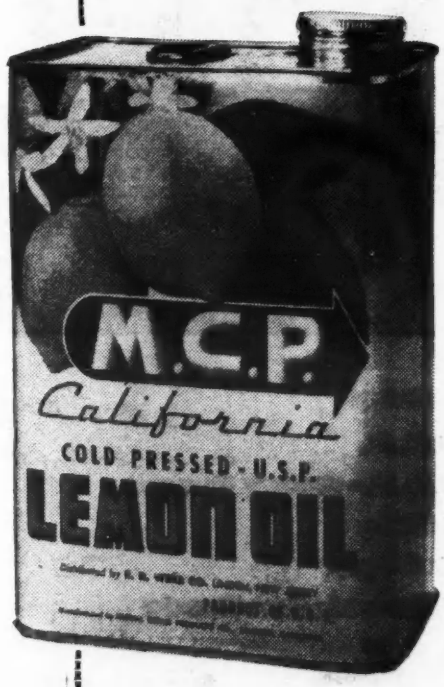
Lead, red, 97% Pb_3O_4, bbls., c.l., same basis lb. .1495- —
bbls., l.c.l., same basis lb. .1595- —
98% Pb_3O_4, bbls., c.l., same basis lb. .1510- —
bbls., l.c.l., same basis lb. .1610- —
Lead resinate precip. 23% Pb, dms., ton lots, dlvd lb. .43¾- —
Lead salicylate, normal dms., works lb. .46 - —
Lead silicate (see Lead white basic silicate).
Lead silicochromate, bgs., c.l., f.o.b. mfrs. point, frt. alld lb. .20 - —
bgs., l.c.l., same basis lb. .21 - —
Lead sulfate (see Lead blue basic sulfate).
Lead tallate, liq., 16% Pb, dms lb. .17¼- —
24% Pb, dms. lb. .26¾- —
Solid, 30% Pb, dms. lb. .23¼- —
Lead, white, basic carbonate, bgs., c.l., shipt pt., frt. alld lb. .18 - —
bgs., l.c.l., same basis lb. .19 - —
basic silicate, bgs., c.l., shipt. pt., frt. alld lb. .16½- —
bgs., l.c.l., same basis lb. .17½- —
basic silicate, bgs., c.l., shipt. pt., frt. alld lb. .17 - —
bgs., l.c.l., same basis lb. .18 - —
Lecithin, edible, tech., bleached, non-ret. dms., c.l., works. lb. .14 - .15
non-ret. dms., l.c.l., same basis lb. .15 - .16
Lecithin, edible, tech., unbleached, non-ret. dms., c.l., same basis lb. .13 - .14
non-ret. dms., l.c.l., same basis lb. .14 - .15
Lemon bioflavonoid complex, 100-lb. package, works lb. 6.45 - —
Lemon oil, USP, Calif., cns., dms. lb. 1.25 - 1.50
Messina, cns. lb. 3.25 - 4.00
Lemongrass oil, cns., dms. lb. 2.00 - 2.20

dl-Leucine, dms., works lb. 12.25 - 15.00
Licorice root, gran., bls. lb. .13 - —
Powd., bls. lb. .15 - .16
Whole, bls. lb. .09 - .10
Lignaloe wood oil, Mexican, cns. lb. 2.75 - 3.50
Lignosulfonate (see under Ammonium or Sodium lignin sulfonate).
Lilac oil lb. 1,500.00
Lime, chemical (quicklime), bulk, c.l., 50,000 lbs., works, E. ton. 14.25 - —
Chemical, hydrated, bgs., c.l., same basis ton. 17.25 - —
spray, bgs., c.l., same basis ton. 18.25 - —
For New York delivery, add $6.29 freight charge
Lime oil, dist., Mexican, cns. lb. 5.75 - —
West Indian, cns. lb. 5.75 - —
Expressed, West Indian, cns. lb. 7.75 - 8.75
Lime salts (see Calcium).
Lime-ammonium nitrogen, 20.5% N (see Ammonium nitrate with dolomite).
Linalool, ex bois de rose oil, dms. lb. 2.45 - 4.25
Syn., 98-100%, dms., works lb. 2.40 - 2.75
Linalyl acetate, ex bois de rose, 90-92%, dms lb. 2.65 - 4.50
96-98% dms. lb. 3.25 - —
Syn., 98-100%, dms., works lb. 2.75 - —
Lindane, 25% formulation, to distributors, dms., frt. alld. lb. 1.35 - 1.50
Lindane, tech., to formulators, 250-lb. dms., 5,000 lbs., dlvd. lb. 2.13 - —
100-lb. dms., 5,000-lbs., dlvd lb. 2.15 - —
250-lb. dms., less than 5,000-lbs., dlvd lb. 2.18 - —
100-lb. dms., less than 5,000-lbs., dlvd lb. 2.20 - —
Linden flowers, with leaves, bls lb. .35 - .40
Without leaves, bls. lb. .42 - .45
Linseed meal, expeller, 32% bulk, Minneapolis, mills ton. 58.50 - —
Extracted, 34% bulk, same basis ton. 52.50 - —
Linseed oil, raw, dms., c.l., New York lb. .1680- —
dms., l.c.l., New York lb. .1770- .1820
tanks, f.o.b. Minneapolis lb. .1320- —
tanks, New York lb. .1431- —
tankwagon, New York lb. .1481- —
Boiled linseed oil, .006c. per lb higher.
Linseed oil, acid, dist., dms lb. .2030- —
Water-white, dms. lb. .2330- —
Litharge, coml., powd., bbls., c.l., works, frt. equald lb. .1425- —
bbls., l.c.l., same basis lb. .1525- —
Lithium aluminum hydride, lump, dms., works lb. 33.00 - 39.00
Lithium benzoate, dms. lb. 1.65 - 1.67
Lithium bromide, NF, gran., bgs., works, frt. equald lb. 2.60 - —
Lithium carbonate, NF, dms., c.l., t.l., dlvd lb. 1.29½- —
dms., ton lots to t.l., dlvd lb. 1.30 - 1.30¼
Tech., dms., c.l., frt. alld lb. .67 - —
dms., t.l., same basis lb. .73 - —
dms., ton lots, same basis lb. .76 - —
dms., smaller lots, f.o.b., plant. lb. .81 - —
Lithium chloride, CP, anhyd., dms., ton lots lb. 1.23½- —
Tech., anhyd., dms., c.l., t.l., dlvd. or works, frt. alld lb. .87 - —
dms., l.c.l., same basis lb. .88 - .92
Lithium citrate, NF, dms., ton lots. lb. 1.50 - —
Lithium fluoride, dms., 20,000-lb. lots, dlvd lb. 2.15 - —
bbls., ton lots and more, dlvd lb. 2.18½- —
bbls., less ton lots, dlvd. lb. 2.23½- —
Lithium hydride, powd., dms., 500-lbs. lots or more, works. lb. 9.50 - —
Lithium hydroxide, monohydrate, dms., c.l., t.l., frt. alld lb. .72 - —
dms., l.c.l., frt. alld. lb. .73 - —
Lithium manganite, dms., works lb. .95 - 1.05
Lithium nitrate, tech., dms., 100-lb. lots lb. 1.15 - 1.25
Lithium salicylate, dms. lb. 1.60 - 1.70
Lithium silicate, dms., works lb. 1.10 - 1.20
Lithium stearate, dms., c.l., works. lb. .47½- —
dms., ton lots, works lb. .48½- —
dms., less-ton lots, works lb. .53½- —
Lithium sulfate, dms., 100-lb. lots. lb. 1.15 - 1.25
Lithium titanate, dms., works lb. 1.15 - 1.25
Lithol red toner, barium, bbls., works lb. .98 - —
Lithol-rubine red toner, pure, bbls., works lb. 1.50 - —
Resinated, bbls., works lb. 1.47 - —
Lithopone, ord., bgs., c.l., dlvd. E. lb. .08¾- —
bgs., l.c.l., dlvd. E. lb. .09½- —
Titanated (high-strength), bgs., c.l., dlvd lb. .11 - —
bgs., l.c.l., dlvd. lb. .12 - —
Lobelia herb, bls. lb. .55 - —
Lobeline sulfate, bots., 50-oz. lots, works oz. 30.00 - —
Locust bean gum, powd., bgs. lb. .35 - .40
Lycopodium, cs. lb. 3.25 - 3.50
l-Lysine monohydrochloride, 25-lb. dms. lb. 4.95 - —

M

Mace, Siauw, No. 1, bls. lb. 1.90 - —
No. 2, whole, bls. lb. 1.65 - —
siftings, bls. lb. 1.60 - —
Mace oil, dist., cns., dms lb. 9.00 - 11.00
Magnesia, calcined, tech., bgs., ctns., frt. equald lb. .25¾- .26¼
Tech., syn., rubber grade, light, bgs., c.l., frt. equald lb .28¾- .30
rubber grade, extra light, bgs., c.l., frt. equald lb. .28 - —
bgs., l.c.l., frt. equald lb. .28¾- —
Above prices are quoted f.o.b. works, freight equald., with Metropolitan New York and competitive producing points
Magnesia, calcined, tech., heavy, 85%, bgs., c.l., f.o.b. Lunning, Nev ton. 39.50 - —
91%, bgs., c.l., same basis. ton. 49.50 - —
95%, bgs., c.l. same basis. ton 59.00 - —
USP, light, bgs. lb. .36½- .37¼
USP, heavy, bgs. lb. .36½- .37¼
Magnesite, chemical grade, calcined, powd., bgs., c.l., works, frt. equald ton. 86.25 - —
Chemical grade, deadburnt, standard grain, bulk., c.l., Chawelah, Wash. ton. 46.00 - —
Magnesium bromide, cs., jars lb. .95 - 1.00
Magnesium carbonate, tech., bgs., c.l., frt. equald lb. .11 - —
bgs., t.l., frt. equald lb. .11½- —
bgs., l.c.l., frt. equald lb. .13½- .14
Magnesium carbonate, USP, bgs., c.l., frt. equald lb. .13½- —
bgs., t.l., frt. equald lb. .14 - —
bgs., l.c.l., frt. equald lb. .15 - 16
Above prices are quoted f.o.b. works, freight equald., with Metropolitan New York and competitive producing points.
Magnesium chloride, anhyd., 92%, flake or pebble, drums., c.l., works lb. .12¾- —
dms., l.c.l., works lb. .14 - .15

ONE LABEL — *First Grade Only*
ONE PRICE — *That Saves You Money*
. . . and Perfect Performance for *Every* Purpose!



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137 Boston Post Road, Cos Cob, Conn.

Magnesium chloride, hydrous, 99%, flake, bgs., c.l., works.ton.55.00 - —
bgs., l.c.l., works.....ton.65.00 -80.00
Magnesium gluconate, 100-lb. dm., f.o.b. works, E..lb. 1.42 - —
Magnesium hydroxide, NF, powd., dms., 500-lbs. or more, f.o.b. works..lb. .24½- .25½
Magnesium lauryl sulfate, dms., c.l., frt. alld..lb. .22½- —
dms., l.t.l., frt. alld. .....lb. .23½- —
tanks, frt. alld. .....lb. .21½- —
Magnesium metal, 99.8%, ingots, 10,000-lb. lots or more, works..lb .36 - —
pigs, 10,000-lb. lots or more, works..lb. .35¼- —
sticks, cs., works, frt. alld on carlots..lb. .59 - —
Magnesium nitrate, cryst., dms., works..lb. .29 - —
Magnesium oxide (see Magnesia, calcined).
Magnesium phosphate, tribasic, NF, bbls..lb. .75 - —
Magnesium silicate (see Talc).
Magnesium silicofluoride, dms., works..lb .10½- .12
Magnesium sulfate, tech., bgs., c.l., works..100 lbs. 2.15 - —
bgs, l.c.l., works.....100 lbs. 2.90 - 3.15
USP, cryst., bgs., c.l., works, 100 lbs. 2.35 - —
bgs., l.c.l., 5,000 lbs., 1 withdrawal..100 lbs. 3.10 - —
bgs., smaller lots.....100 lbs. 3.35 - —
Magnesium trisilicate, USP, fib. dms., 5,000-lb. lots..lb. .38 - —
fib. dms., 1,000-lb. lots.....lb. .40 - —
fib. dms., 100-lb. lots.....lb. .45 - —

Bulky and super grades of magnesium trisicilate 7c. per. lb. higher.

Malachite green, straight, PTA, bbls., works..lb. 5.30 - —
Malathion, dms., c.l., works.....lb. .89 - —
dms., l.c.l., works.....lb. .92 - 1.01
Maleic acid, cryst., powd., dms..lb. .37¼- —
Maleic anhydride, dms., c.l., frt. equald..lb. .24 - —
dms., l.c.l., frt. equald.....lb. .25½- —
tanks, frt. equald.....lb. .22½- —
Maleic anhydride in bags ½c. per lb. less.
Malic acid, tech., dms.....lb. .50 - —
Mandelic acid, NF, dms., 1,000-lb. lots..lb. 2.35 - —
dms., smaller lots.....lb. 2.40 - 2.50
Mandrake root, bls.....lb. .40 - —
Manganese acetate, dms., dlvd....lb. .35 - —
Manganese borate, tech., fib. dms. lb. .23½- —
Manganese carbonate, chemical grade, 46% Mn. bgs., 20,000-lb. lots and more, works..lb. .11 - .16
Manganese chloride, CP, anhyd., dms., 20,000-lb. lots, works lb. .21¾- —
smaller lots, works .....lb. .23½- —
Manganese dioxide, African, 83-87%, 40,000 to 99,999-lb. lots, burlap paper lined bgs., gross for net works..ton.148.00 - —
40,000 to 99,999-lb. lots, paper bgs., same basis.....ton.144.50 - —
40,000 to 99,999-lb. lots, dms. same basis..ton.152.50 - —

Prices for manganese dioxide in 10,000 to 40,000-lb. lots, $3 per ton higher.

Manganese gluconate, dms.....lb. 1.84 - —
Manganese hydrate, dms., dlvd..lb. .35 - —
Manganese hypophosphite, NF, dms. lb. 3.52 - —
Manganese linoleate, liq., 4.35% Mn, dms..lb. .35¾- —
Solid, precip., 8.2% Mn, bbls..lb. .41¼- —
Manganese metal, electrolytic, dms., c.l., dlvd. E. .....lb. .34 - —
dms., ton lots, dlvd. E. .....lb. .36 - —
dms., smaller lots, dlvd. E..lb. .38 - —
Manganese naphthenate, liq., 6% Mn, dms., frt. alld..lb. .29¾- —
Manganese resinate, fused, 3½% Mn, dms..lb. .29¼- —
Precip., 6½-7% Mn, dms.....lb. .37 - —
Manganese sulfate, fertilizer grade, 65% $MnSO_4$, bgs., c.l., dlvd., S. E..ton.86.50 - —
bgs., l.c.l., dlvd. S. E..ton.93.50 - —
Manganese tallate, 6%, dms.....lb. .26½- —
Manila copal gum, C, bgs. .....lb. .35 - .39
DBB, bgs. .....lb. .25 - .28
DK, bgs. .....lb. No stocks.
DK, dust, bgs. .....lb. .14 Nom.
MA, soft, bgs. .....lb. .20 - .24
WS, bgs. .....lb. No stocks.
Mannitol, com'l, fib. dms., ton lots, works..lb. .60 - —
fib. dms., to ton lots, works..lb. .62 - —
fib. dms., single dm., works..lb. .65 - —
Marine pitch, dms. .....lb. .04¼- .05
MBTS (see Mercaptobenzothiazyl disulfide).
MBT (see 2-Mercaptobenzothiazole).
Melamine, bgs., c.l., works.....lb. .26½- —
bgs., l.c.l., works .....lb. .28 - —
Menadione, USP, bots. .....gram. .044 - .05
Menhaden oil, crude, tanks, works, Atl. & Gulf..lb. .06 - —
Menthol, nat., USP, Brazilian, large crystals, cs..lb. 8.50 - —
Nat., USP, Brazilian, regular crystals, cs..lb. 8.30 - 8.40
Japanese, cs. .....lb.12.00 - —
Syn., USP, racemic, 25-lb. lots..lb. 4.25 - —
2-Mercaptobenzothiazole, bgs., fib. dms., ton lots, works, frt. alld..lb. .44 - —
bgs., fib. dms. less ton lots, same basis..lb. .46 - —
Mercaptobenzothiazyl disulfide, bgs., fib. dms., ton lots, works, frt. alld..lb. .54 - —
bgs., fib. dms., less ton lots, same basis..lb. .56 - —
Mercuric chloride, NF, cryst., dms., 100 lbs., f.o.b. works..lb. 4.03 - —
USP, gran. or powd., 50-lb. dm., 100 lbs., f.o.b. works..lb. 3.78 - —
Mercuric cyanide, NF VIII, powd., fib. dms..lb. 5.84 - —
Mercuric iodide, red, NF, 100-lb. dm., f.o.b. works..lb. 6.97 - —
Mercuric oxide, red, NF IX, 50-lb. dm., 100 lbs., f.o.b. works, lb. 4.72 - —
tech., 50-lb. dm., 100 lbs., same basis..lb. 4.52 - —
Mercuric oxide, yellow, NF, 50-lb. dm., 100 lbs., same basis, lb. 4.89 - —
tech., dms., 100 lbs.....lb. 4.35 - —
25-lb. fib. dm. .....lb. 4.38 - —
Mercurous chloride (see Calomel).
Mercurous iodide, yellow, NF, 100-lb. dm., f.o.b. works..lb. 8.22 - —
Mercury, ammoniated (see White precipitate, USP XV).
Mercury metal, 76 lbs. per flask, net-flask.209.00 -212.00
Mesityl oxide, dms., c.l., dlvd....lb. .15 - —
dms., l.c.l., dlvd. .....lb. .16½- —
tanks, dlvd. .....lb. .12½- —
Meta-aminophenol (see m-Aminophenol).
Metachloroaniline (see m-Chloroaniline).
Metanilic acid, dms., works .....lb. .57 - .75
Metanitroparatoluidine (see m-Nitro-toluidine).
Metanitroaniline (see m-Nitroaniline).
Metaphenylenediamine (see m-Phenylenediamine).
Metatoluidine (see m-Toluidine).
Metatolylenediamine (see 2,4-Tolylenediamine).
Methacrylic acid, glacial, 98%, dms., truckloads, frt. equald..lb. .42½- —
dms., smaller lots, frt. equald. lb. .43 - .75
tanks, works, frt. equald..lb. .40 - —
Methanol, nat, denaturing grade, tanks, frt. alld..gal. .85 - —
Syn., zone 1, dms., c.l., or t.l. min., dlvd..gal. .51½- —
dms., l.c.l., dlvd. .....gal. .61½- —
tankwagon, 2,000-4,000 gal. lots, dlvd. Metropolitan area..gal. .35 - —
tankwagon, 4,000 gal. min., dlvd..gal. .30 - —
tankwagon, 4,000 gal. min., f.o.b. terminal..gal. .29 - —
Methanol, syn., zone 2, dms., c.l., or t.l., min. frt. alld. or dlvd. gal. .55½- —
dms., l.c.l., works .....gal. .65½- —
tankwagon, 2,000-4,000 gal. lots, min., dlvd., Metropolitan area..gal. .39 - —
tanks, 4,000 gal. min., dlvd. gal. .34 - —

Synthetic methanol zones are: Zone 1 is all continental US E. of eastern boundaries of Ariz., Idaho and Utah. Zone 2 is remainder of US west of above state boundaries comprising Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.

Methapyrilene fumarate, 100-999 lbs., dms., f.o.b. works, frt. equald..lb.21.75 - —
Methapyrilene hydrochloride, 100-999 lbs., dms., f.o.b. works, frt. equald..lb.27.25 - —
Methenamine (see Hexamethylene-tetramine).
Methionine hydroxyanalogue, (calcium salt) 90% min., dms., t.l., frt. alld. ....lb. 1.10 - —
dms., l.t.l., same basis.....lb. 1.16 - —
dl-Methionine, fib. dms., frt. alld., 50-lb. or more..lb. 3.50 - —
Feed grade, 98%, fib. dms., same basis..lb. 1.55 - —
Methoxychlor, 50% wettable powder, dealers, dms., cs..lb. .66 - —
Methyl abietate, non-ret. dms., c.l., dlvd. zone 1..lb. .21½- —
non-ret. dms., l.c.l., same basis lb. .22 - .22½
Methyl abietate, hydrogenated, non-ret. dms., c.l., dlvd. zone 1 lb. .23½- —
non-ret. dms., l.c.l., same basis, lb. .24 - .24½

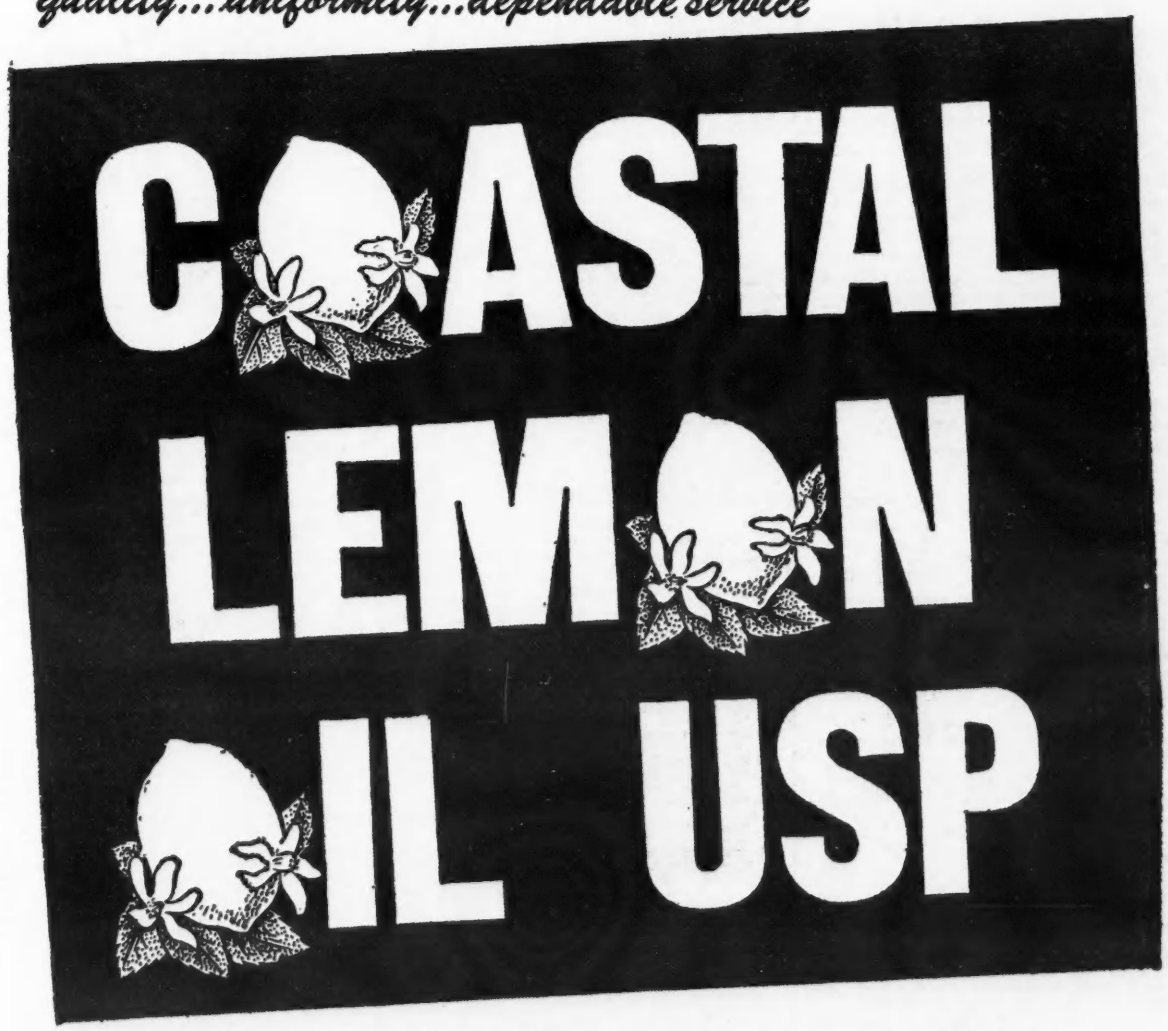
Zone 1 includes New England and Middle Atlantic states, Va., W. Va., N. C., Ohio, Ky., Mich., Ind., Ill., Wis., St. Paul and Minneapolis, Minn.; St. Louis, Mo.; Miss., Ala., Ga., Fla., S. C. and Tenn.

Methyl acetone, nat., dms., l.c.l., E. of Miss., frt. alld..gal. .62½- —
Methyl acetone, syn., dms., c.l., frt. alld. E..gal. .66 - —
dms., l.c.l., frt. alld. E. ....gal. .76 - —
tanks, frt. alld. E. .....gal. .51 - —

Synthetic methyl acetone E. territory comprises all states East of and including Colo., Mont., N. Mex. and Wyo. West territory is made up of all states west of those four.

Methyl acrylate, dms., c.l., t.l., dlvd. lb. .39 - —
dms., l.t.l., dlvd. .....lb. .40 - —
tanks, dlvd. .....lb. .37 - —
Methyl alcohol (see Methanol).
Methyl amyl acetate, dms., c.l., dlvd. E..lb. .17 - —
dms., l.c.l., dlvd. E. .....lb. .18½- —
tanks, dlvd. E. .....lb. .14½- —
Methyl amyl alcohol, dms., c.l., dlvd. lb. .17 - —
dms., l.c.l., dlvd. .....lb. .18½- —
tanks, dlvd. .....lb. .14½- —
Methyl amyl ketone, dms., works. lb. 1.05 - —
N-Methylaniline, tech., tanks, frt. alld..lb. .60 - —
Methylanthranilate, cns. .....lb. 2.25 - 2.45
Methyl benzoate, cns., dms. ....lb. .60 - .75
Methyl bromide, service organization prices, 40 to 375-lb. cyls., large lots, frt. alld..lb. .62 - .63
Methyl cellulose, special vis., (1,500-4,000 cps.) 50-lb. bgs., c.l., works..lb. .82 - —
50-lb. bgs., 2,000-lb. lots and more, same basis.....lb. .89 - —
50-lb. bgs., smaller lots, frt. alld. on 100 lbs..lb. 1.05 - —
Standard vis. (15,400 cps.) 50-lb. bgs., c.l., frt. alld..lb. .69 - —
50-lb. bgs., 2,000-lb. lots and more, same basis.....lb. .76 - —
50-lb. bgs., smaller lots, frt. alld. on 100 lbs..lb. .79 - .83

quality...uniformity...dependable service



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Methyl chloride, indust., cyls., frt. equald lb. .22¼- —
tanks, multi-unit, same basis. lb. .16¼- —
tanks, single unit, same basis. lb. .12¾- —
Refrigerator mfrs., cyls., dlvd lb. .48¾- —
Other consumers or service men, cyls., dlvd lb. .67¾- —
Methyl chloroform (see 1,1,1-Trichloroethane).
Methyl cinnamate, cns lb. 1.55 - 1.80
Methyl ethyl ketone, dms., c.l., dlvd lb. .15 - —
dms., l.c.l., dlvd lb. .16½- —
tanks, dlvd. lb. .12½- —
2-Methyl-5-ethyl pyridine, dms., c.l., works lb. .45 - —
dms., l.c.l., works lb. .45¾- —
tanks, works lb. .43 - —
Methyl formate, refd., dms lb. .35 - .40
Tech., non-ret. dms., any quantity, works lb. .10 - —
tanks, works lb. .07 - —
a-D Methyl glucoside, tech., 100-lb. multiwall paper bgs., c.l., works lb. .21 - —
100-lb. multiwall paper bgs., t.l., min. 23,000 lbs., works. lb. .21½- —
100-lb. multiwall paper bgs., l.c.l., works lb .23 - —
Methyl heptin carbonate, bots lb. 27.75 - 31.00
Methyl p-hydroxybenzoate, fcc dms. lb. 1.90 - 2.00
Methyl ionone, standard, cns., dms. lb. 3.40 - 4.85
Methyl isoamyl ketone, dms., c.l., dlvd lb. .20 - —
dms., l.c.l., dlvd. lb. .20½- —
tanks, dlvd. lb. .17½- —
Methyl isobutyl carbinol (see Methyl amyl alcohol).
Methyl isobutyl Ketone, dms., c.l., dlvd lb. .17 - —
dms., l.c.l., dlvd lb. .19¼- —
tanks, dlvd lb. .14½- —
Methyl methacrylate, dms., c.l., t.l., frt. equald, with Belle, W Va lb. .31 - —
dms., smaller lots, same basis lb. .31¼- —
tanks, same basis lb. .29 - —
Methyl naphthyl ketone, cryst., cns lb. 2.45 - 4.30
Methyl parahydroxybenzoate (see p-Hydroxybenzoate)
Methyl parathion, tech., 80%, dms., frt. alld. E lb. .84 - —
Methyl parathion prices 2c. per lb. higher in West.
Methyl roseaniline chloride, NF., 5-lb fib dms lb. 6.90 - —
Methyl salicylate, dms., t.l., frt. alld lb. .60¼- —
dms., l.c.l., same basis lb. .62½- .67½
Methyl testosterone, USP, 100-gram bots gram. No Prices.
2-Methyl-5-vinyl pyridine, 40-dm. lots or more, f.o.b. works lb 1.30 - —
5-39 dm. lots, same basis lb. 1.35 - —
tanks, same basis lb. 1.25 - —
Methyl violet toner, molybdated, PMA, bbls., dlvd. E. of Rockies lb. 2.80 - —
Tungstated, PTMA, bbls., same basis lb. 4.35 - —
Methyl violet prices 1c. higher W. of Rockies.
Methylene blue, fib. dms., 100-lb. lots, frt. adjusted lb. 3.25 - —
Methylene chloride, tech., straight or assorted, dms., c.l., or t.l., dlvd lb. .13½- —
dms., l.c.l., t.l., dlvd lb. .15¾- —
tanks, 4,000-gal. min., dlvd lb. .12¼- —
tanktrucks, 1,000-gal. min., dlvd. lb. .13¼- —
b-Methylnaphthalene, 32°C., m.p., dms., works lb .90 - —
Methylpentanediol (see Hexylene glycol).
Methylphenylpyrazolone (see 1-phenyl-3-methyl-pyrazolone-5).
Methylthionine chloride (see Methylene blue).
Mica, dry-grd., paint, plastic, 100 mesh, bgs., c.l., works lb. .04 - —
roofing, 20 to 80 mesh, works lb. .03 - —
wet-grd., biotite, b.s., c.l., works, frt. alld.E lb. .06½- —
bgs., l.c.l., ex-whse. lb. .07¼- —
paint or lacq., bgs., c.l., 325 mesh, works, frt. alld. E. lb. .08¼- —
bgs., l.c.l., ex-whse or freight alld. E lb. .09 - —
Mica, wet-grd., rubber, bgs., c.l., works, frt. alld. E lb. .08 - —
bgs., l.c.l., ex-whse, or frt. alld. E lb. .08¾- —
wallpaper, bgs., c.l., works, frt. alld.E lb. .08¾- —
bgs., ex-whse. or frt. alld. E. lb. .09 - —
white, 5-10 microns, bgs., c.l., works, frt. alld. E lb. .08¼- —
Mica, wet-grd. W. of Miss. ½c. higher; W. of Rockies 1c. higher.
Microcrystalline wax, petroleum, coating grades, tankcars, works lb. .10 - .11
laminating grades, tankcars, works lb. .11 - .12
Mineral black, bgs., works lb. .0160- .0673
Mineral oil, white, tech., 50-65 vis., non-ret. dms., c.l., f.o.b. refy gal. .65 - —
50-65 vis., non-ret. dms., l.c.l., basis gal. .70 - —
tankscars, refy. gal. .49 - —
Mineral oil, white, tech., 65-75 vis., non-ret. dms., c.l., same basis gal. .65 - —
non-ret. dms., l.c.l., same basis gal. .70 - —
tankcars, refy. gal. .49 - —
NF, 80-90% vis., non-ret. dms., c.l., same basis gal. .66 - —
non-ret. dms., l.c.l., same basis gal. .71 - —
tankcars, refy. gal. .50 - —
NF, 135-138 vis., non-ret. dms., c.l., same basis gal. .72 - —
Mineral oil, white, NF, 135-138 vis., non-ret. dms., l.c.l., same basis gal. .77 - —
tankcars, rfy. gal. .56 - —
NF, 145-155 vis., non-ret. dms., c.l., same basis gal. .78 - —
non-ret. dms., l.c.l., same basis gal. .83 - —
tankcars, refy. gal. .62 - —
Mineral oil, white, USP, 180-190 vis., non-ret. dms., c.l., same basis gal. .80½- —
non-ret. dms., l.c.l., same basis gal. .85½- —
tankcars, refy. gal. .64½- —
USP, 200-210 vis., non-ret. dms., c.l., f.o.b. refy gal. .82½- —
non-ret. dms., l.c.l. gal. .87½- —
tankcars, refy gal. .66½- —
USP, 340-350 vis., non-ret. dms., c.l., f.o.b. refy gal. .87½- —
non-ret. dms., l.c.l. gal. .92½- —
tankcars, refy. gal. .71½- —
(For f.o.b N. Y. add 2c. for tankcars; 3c. for c.l., and 3c. for l.c.l. non-ret. dms.).

Mineral orange, American, bbls., c.l., works lb. .17 - —
bbls., c.l., same basis lb. .18 - —
Mineral spirits, petroleum, odorless, tankcars, New Jersey gal. .29 - —
New York gal. .305 - —
Houston, Texas gal. .25 - —
regular, tankcars, New Jersey and New York gal. .18 - —
Group 3 gal. .12875- —
Houston, Texas gal. .145 - —
140 F. flash, New York, New Jersey at terminal gal. .205 - —
Houston, Texas gal. .17 - —
Mink oil, dms. lb. 2.75 - —
Mirbane oil (see Nitrobenzene).
MNPT maroon toner, kgs., c.l., works lb. 6.30 - —
Molasses, blackstrap, feed grade, tanks, New Orleans gal. .10 - .10½
tanks, New York gal. .13½- —
Molybdated orange, bbls. lb. .49 - —
Molybdenum metal, powd., 80 or 200 mesh, ctns., works kilo. 7.84 - —
325 mesh, ctns., works kilo 9.13 - —
Molybdenum trioxide, purif., dms., works lb. 1.15 - —
Tech., chemical, dms., works, basis Mo content lb. 1.48 - —
Tech., metallurgical, dms., works, basis Mo. content lb. 1.47 - —
Molybdic acid, 85%, dms., works. lb. 1.05 - 1.15
Monoallylamine, dms., c.l., dlvd lb. .965 - —
dms., c.l., dlvd. lb. .995 - —
tanks, dlvd. lb. .96 - —
Monobutylamine, dms., c.l., dlvd. E. of Rockies lb. .57½- —
dms., l.c.l., same basis lb. .59 - —
tanks, same basis lb. .55 - —
Mono-tert-butyl-m-cresol, dms., c.l., works lb. .55 - —
dms., l.c.l., works lb. .56 - —
tanks, works lb. .54 - —
Mono-tert-butyl-m-cresol, dms., c.l., works lb. .55 - —
dms., l.c.l., works lb. .56 - —
tanks, works lb. .54 - —
Monochloracetic acid, purif. (see Chloroacetic acid, mono).
Monochlorobenzene, dms., c.l., frt. alld. or dlvd. E lb. .10½- —
dms., l.c.l., same basis lb. .11½- —
tanks, same basis lb. .08¾- —
Monoethanolamine, dms., c.l., dlvd. lb. .27½- —
dms., l.c.l., same basis lb. .29 - —
tanks, same basis lb. .25 - —
Monoethylalphanaphthylamine (see
Monoethylamine, 70% aqueous, solution, dms., c.l., dlvd. E. 100% basis lb. .38½- —
dms., l.c.l., dlvd. E., 100% basis. lb. .40 - —
tanks, dlvd. E., 100% basis lb. .35 - —
Monoethylaniline (see N-Ethylaniline).
Monoethylorthotoluidine (see N-Ethyl-o-toluidine)
Monoisopropanolamine, dms., c.l., dlvd. E lb. .27½- —
dms., l.c.l., same basis lb. .29 - —
tanks, same basis lb. .25 - —
Monoisopropylamine, anhyd., dms., c.l., dlvd lb. .33½- —
dms., l.c.l., same basis lb. .35 - —
tanks, same basis lb. .31 - —
Monomethylamine, anhyd., cyls., l.c.l., frt. equald., 100% basis lb. .30 - —
tanks, 100% basis lb. .26 - —
30-35% soln., dms., c.l., frt. equald., 100% basis lb. .36 - —
Monomethylamine, 30-35% soln., dms., l.c.l., frt. equald, 100% basis lb. .36½- —
tanks, frt. equald., 100% basis. lb. .26 - —
40% soln., dms., frt. equald., 100% basis lb. .33 - —
dms., l.c.l., frt. equald., 100% basis lb. .33½- —
tanks, frt. equald, 100% basis lb. .26 - —
Monopentaerythritol, tech., bgs., c.l., dlvd. E lb. .31 - —
bgs., l.c.l., dlvd. E lb. .32 - —
Monopotassium glutamate, dms., 1,000-lb. lots, frt. alld lb. 3.05 - —
dms., 100-lb lots, same basis lb. 3.25 - —
Monosodium glutamate, dms., dlvd. lb. 1.07 - 1.15
Monosodium phosphate (see sodium phosphate, monobasic).
Montan wax, Calif., refd., bgs lb. .27 - .28
Imp., crude, Bohemian, bgs. lb. .21 - .22
German, bgs. lb. .25 - .26
Morphine, cns., 100-oz., f.o.b. works. oz. 12.35 - —
Morphine hydrobromide, cns., 100-oz., f.o.b. works oz. 9.90 - —
Morphine hydrochloride, NF, cns., 100-oz., f.o.b. works oz. 9.90 - —
Morphine sulfate, USP, cns., 100-oz., f.o.b works oz. 9.90 - —
Morpholine, dms., c.l. dlvd. E lb. .55¼- —
dms., l.c.l., dlvd. E lb. .56¼- —
tanks, dlvd. E lb. .52¾- —
Muriatic acid (see Hydrochloric acid).
Musk, syn., ambrette, fib. dms., 100-lb. lots lb. 4.40 - 4.90
cns., 25-lb lots lb. 4.50 - 5.00
Ketone, fib. dms., 100-lb. lots lb. 4.60 - 5.10
cns., 25-lb. lots lb. 4.70 - 5.20
Xylol, fib. dms., 100-lb. lots lb. 1.26 - —
cns., 25-lb lots lb. 1.40 - —
Mustard seed, Danish, yellow, bgs. lb. .11½- —
Montana, yellow, bgs lb. .10½- —
Oriental, bgs lb. .08 - —
Mustard, oil, syn., bots lb. 1.60 - 1.85
Myristic acid, bgs. lb. .28¼- .30¾
tanks lb. .27¼- —
Myrrh gum, cs lb. .65 - .75

N

Naphtha, high solvency (see Solvent naphtha, petroleum).
Naphtha, petroleum, cleaner's (see Cleaner's naphtha).
Naphtha, VM&P, petroleum, tankcars, New Jersey and New York gal. .19 - —
Group 3 gal. .13875- —
Houston, Texas gal. .155 - —
Naphthalene, crude, dom., 78°, tanks, frt. equald lb. .06 - —
imp., 78°, bgs., large lots lb. .09½ Nom.
Refd., indust., chipped, crushed, bgs., frt. equald lb. .13½- —
tanks, same basis lb. .10¾- —
Naphthalene, refd., indust., balls, flakes, wholesalers, jobbers, bbls., c.l., same basis. lb. .15½- —
cs., 50 lbs., c.l., same basis. lb. .15¾- —
1-lb. pkgs., c.l., same basis. lb. .18¼- —
a-Naphthol, dms., frt. alld lb. 1.02 - —
b-Naphthol, tech., flake, bbls., c.l., works lb. .34 - —
bbls., l.c.l., works lb. .36 - —
Naphthol, JTR, red toner, bbls., works lb. 5.00 - —
1-Naphthol-3,6-disulfonic 8-amino acid (see H acid).
1-Naphthol-4 sulfonic acid (see Neville and Winther's acid).
1-Naphthol-5-sulfonic acid (see L acid).
1-Naphthol-5-sulfonic 8-amino acid (see S acid).
2-Naphthol-6,8-disulfonic acid (see Gamma acid).
Naphthol sulfonic mixed acid (see Cleve's acid).
a-Naphthylamine, dms., frt. alld lb. .52 - —
b-Naphthylamine, tech., flake, bbls., works lb. 1.60 - —
1-Naphthylamine-5-sulfonic acid (see Laurent's acid).
2-Naphthylamine-4,8-disulfonic acid (see Cassella acid).
2-Naphthylamine-1-sulfonic acid (see Tobias acid).
2-Naphthylamine-6-sulfonic acid (see Broenner's acid).
2-Naphthylamine-7-sulfonic acid (see F acid).
Naringin, fib. dms. lb. 8.50 - —
Neatsfoot oil, 15° cold test, dms lb. .29 Nom.
20° cold test, dms. lb. .28 Nom.
30° cold test, dms. lb. .27 Nom.
Neocinchophen, USP, dms., frt. adjusted lb. 7.00 - 8.00
Neomycin sulfate, fib. dms., 1-kilo basis activity gram. .25 - —
fib. dms., 100-999-gram lots, basis activity gram. .30 - —
Tech., fib. dms. gram. .13½- —
Neopentylglycol, dms., c.l., dlvd lb. .32 - —
dms., l.c.l., same basis lb. .33 - —
Nerol, dms. lb. 4.75 - —
Neroli oil, NF, French, bots lb. 425.00 - 575.00
Tunisian, bots. lb. 400.00 - —
Nerolin, cns. lb. 2.45 - 2.85
Neville and Winther's acid, dms., frt. alld. lb. 1.40 - —
Niacinamide (see Nicotinamide).
Nickel acetate, bbls., dlvd. lb. .68½- .75½
Nickel carbonate bbls., dlvd lb. 78¼- .85¼
Nickel chloride, bbls., dlvd. lb. .37 - .45
Nickel formate, bbls., ton lots, frt. alld. lb. .72 - .73
Nickel metal, electro cathodes, cs., works lb .74 - —
Nickel nitrate, dms., frt. alld. lb. .31½- .33½
Nickel oxide, black, bbls. lb. .85 - —
Green, bbls. lb. .84 - —
Nickel sulfate, bgs., c.l., dlvd. lb. .28 - —
bgs., l.c.l., dlvd. lb. .28½- .36
Nicotinamide, USP, 50-kilo., dms., 100 kilos., dlvd kilo. 6.50 - —
dms., less than 100 kilos, dlvd. kilo. 6.60 - 7.00
Nicotine sulfate, 40%, dealers, 50-lb. dms. frt. alld lb. 1.20 - —
40%, manufacturers, 500-lb. dms., frt. alld lb. 1.05 - —
Nicotinic amide, USP (see Nicotinamide).
Niger seed, bgs. lb. .10¼- —
Nikethamide, cbys. lb. 5.00 - —
Nitric acid, 36° Be., cbys., c.l., works E 100 lbs. 5.75 - —
cbys., l.c.l., works E 100 lbs. 6.05 - 6.85
38° Be., cbys., c.l., works E. 100 lbs. 6.25 - —
cbys., l.c.l., works E 100 lbs. 6.55 - 7.35
40° Be., cbys., c.l., works E. 100 lbs. 6.75 - —
cbys., l.c.l., works E 100 lbs. 7.05 - 7.85
42° Be., cbys., c.l., works E. 100 lbs. 7.25 - —
cbys., l.c.l., works E 100 lbs. 7.55 - 8.35
58.5 to 68% HNO_3, tanks, works, 100% basis 100 lbs. 3.90 - —
94½ to 95½% HNO_3, tanks, works, 100% basis 100 lbs. 4.90 - —
CP, NF, consumer, cbys., extra, c.l., works lb. .18½- —
cbys., extra, l.c.l., works. lb. .20 - —
5-pint bots., extra, cs., c.l., same basis lb. .22¼- —
5-pint bots., extra, cs., l.c.l., same basis lb. .24 - .25
dms., frt. alld lb. .99 - —
m-Nitroaniline, cryst., dms., frt. alld lb. 1.15 - —
Paste, dms., frt. alld., 100% basis. lb. 1.10 - —
o-Nitroaniline, flaked, dms., t.l., frt. alld. lb. .49 - —
dms., l.t.l., frt. alld. lb. .51 - —
o-Nitroaniline orange toner, kgs. lb. 1.35 - —
p-Nitroaniline, c.l., t.l., dms., frt. alld. lb. .445 - —
dms., l.c.l., same basis lb. .46½- —
o-Nitroanisole, tech., tanks, frt. alld. lb. .36 - —
p-Nitroanisole, tech., solid, dms., frt. alld lb. .72 - —
Nitrobenzene, dbl. dist., dms., c.l., frt. alld lb. .13 - —
dms., l.c.l., frt. alld. lb. .14 - —
tanks, frt. alld. lb. .11 - —
p-Nitrobenzoic acid, dms., c.l., works lb. .63 - —
4-Nitro-2-aminophenol, tech., paste, dms., l.c.l., works lb. .64 - —
Nitrocellulose, ester-soluble, 30-35 cps., ¼, ½, ¾, 5-6, 15-20, 30-40, 60-80, 125-175 seconds, bbls., c.l., works lb. .37½- —
bbls., l.c.l., same basis lb. .33½- .40½
18-20, cps., bbls., c.l., same basis lb. .39½- —
bbls., l.c.l., same basis lb. .40½- .42½
250-400, 600-1,000 seconds, bbls., l.c.l., same basis lb. .43 - .46
Nitrocellulose, spirit soluble, 30-35 cps., ¼, ½ seconds, bbls., c.l., same basis lb. .43 - —
bbls., l.c.l., same basis lb. .44 - .46
5-6 cps., 40-60 seconds, bbls., c.l., same basis lb. .42 - —
bbls., l.c.l., same basis lb. .43 - .45
Denatured alcohol used in the manufacture of nitrocellulose is charged extra. Drums extra but returnable.
o-Nitrochlorobenzene, dms., c.l., frt. alld lb. .15 - —
dms., l.c.l., same basis lb. .16 - —
tanks, same basis lb. .13 - —
p-Nitrochlorobenzene, dms. lb. .26 - .27
2-Nitro-p-cresol, tech., dms., dlvd lb. .88 - —
Nitroethane, dms., c.l., dlvd. E lb. .25 - —
dms., l.c.l., dlvd. E lb. .26½- —
tanks, dlvd E. lb. .22½- —
Nitroethane prices West of Rockies are 1c. higher.
Nitrogen solutions, tanks, frt. equald, N unit. 1.26 - —
Nitrogen tetroxide, indust., tankcars, f.o.b. Hopewell, Va lb. .065 - —
Cyls., t.l., min. 5 tons, same basis lb. .07½- —
Cyls., l.c.l., l.t.l., same basis lb. .15 - —
Nitrogenous process tankage, bulk, works unit-ton. 4.50 - 5.00
Nitrogenous sewage sludge, bulk, f.o.b. Chicago, works. unit-ton. 2.93 - —
Nitromethane, dms., t.l., dlvd. E lb. .25 - —
dms., l.t.l., dlvd. E lb. .26½- —
Nitromethane prices West of Rockies are 1c higher.
a-Nitronaphthalene, bbls., frt. alld. lb. .31 - —
o-Nitrophenol, dms., works, frt. equald lb. .94 - —
p-Nitrophenol, dms., c.l., frt. alld. lb. .45 - —
dms., l.c.l., frt. alld lb. .47 - —
1-Nitropropane, dms., c.l., frt. alld. E. of Rockies lb. .23½- —
dms., l.c.l., same basis lb. .25 - —
tanks, same basis lb. .21 - —
2-Nitropropane, dms., c.l., frt. alld. E of Rockies lb. .18½- —
dms., l.c.l., same basis lb. .20 - —
tanks, same basis lb. .16 - —
Nitropropane prices West of Rockies are 1c. per lb. higher.
m-Nitrotoluene, tech., dms., frt. alld. lb. .50 - —
o-Nitrotoluene, dms., c.l., frt. alld lb .15 - —
dms., l.c.l., frt alld. lb. .16 - —
tanks, frt. alld. lb. .13 - —
p-Nitrotoluene, tech., cast, dms., c.l., works lb. .27½- —
dms., l.c.l., works lb. .28 - —
flake, dms., c.l., t.l., works lb. .27½- —
dms., l.c.l., works lb. .28 - —
m-Nitro-p-toluidine, dms. lb. 1.25 - —
Nonylphenol, dms., c.l, frt. alld. lb. .22 - —
dms., l.c.l., frt. alld. lb. .23 - —
tanks, frt. alld. lb. .19½- —
Nonylphenol prices on shipments to Western States are 2c. higher.
Nutmegs, East Indian, whole, bgs. lb. 1.36 - —
West Indian, bgs lb. 1.30 - —
Nutmeg oil, USP, dist., East Indian, cns lb. 9.00 - 12.00
West Indian, cns. lb. 9.00 - 12.00
Nux vomica, bls. lb. .20 - —
Powd., bbls., bxs. lb. .20 - .22

O

Ocher (see Iron oxide yellow, nat.).
Ocotea cymbarum oil, dms. lb. .46 - .48
Octane, indust., tanks, Bayonne, N.J. gal. .20 - —
Borger, Tex. gal. .15¾- —
1-Octanol, tech., dms., c.l., dlvd., Zone 1 lb. .43½- —
dms., l.c.l., dlvd. Zone 1—lb. .45½- —
tanks, dlvd., Zone 1 lb. .41 - —
Octyl alcohol, perfumers grade, bots. lb. 1.60 - 3.25
Octyl alcohol, tech, (see 1-Octanol, tech).
tert-Octylamine, dms., c.l., t.l., f.o.b. works lb. .54½- —
dms., l.c.l., same basis lb. .55 - —
Octyl phenol, bgs., c.l., works lb. .22 - —
bgs., l.c.l., works lb. .22½- —
tanks, works lb. .21 - —
Octyl phenol in dms., 11c. higher.

OILS
Oil quotations are listed individually. For example, prices on Oil, coconut, may be found in the C's under Coconut oil.

Oiticica oil, liq., dms. lb. .16 - .16½
tanks lb. .14 - —
Oleic acid, dbl.-dist. (white), dms. lb. .17½- .20
tanks lb. .15 - —
S.d., dms. lb. .16¼- .18¼
tanks lb. .13¾- —
Oleo oil, extra, dms. lb. .14¾- —
Oleostearine, dms. lb. .12½- .12¾
Oleum (see Sulfuric acid, fuming).
Olibanum gum, siftings, cs lb. .15 - .20
Tears, cs. lb. .22 - .30
Olibanum oil, bots lb. 5.00 - 7.65
Extra fine, bots lb. 8.00 - 9.50
Olive oil, edible, dms., spot, duty-paid gal. 2.30 - 2.35
Olivine, crude, works ton. 12.00 - —
20 mesh, works ton. 15.00 - —
100 mesh works ton. 20.00 - —
Opium, USP, cns., 25-lbs., f.o.b. works oz. 19.20 - —
gran., cns., 50 lbs., same basis. oz. 21.65 - —
powd., cns., 50 lbs., same basis. oz. 21.65 - —
Orange oil, sweet distilled, Calif., cns., dms lb. .60 - —
Florida, cns., dms lb. .55 - —
Expressed, Calif., cns., dms lb. .70 - .80
Florida, cns., dms lb. .45 - .50
Messina, cns. lb. 3.25 - 5.00
West Indian, bitter, cns., dms. lb. 2.50 - 3.25
Orange peel, bitter, Haitian, bls lb. .18 - .20
Sweet lb. .28 - .30
Origanum oil, Spanish, cns. lb. 1.80 - 2.30

ORANGE PIGMENTS
Orange pigment quotations are listed individually. For example, prices on Orange, chrome, may be found in the C's under Chrome orange.

Orris root, Florentine, bls lb. .55 - —
powd., bbls., bxs lb. .65 - —
Verona, bls lb. .35 - —
powd., bbls., bxs lb. .45 - —
Orthoanisidine (see o-Anisidine).
Orthochlorobenzaldehyde (see o-Chlorobenzaldehyde).
Orthochloroaniline (see o-Chloroaniline).
Orthochlorobenzoic acid (see o-Chlorobenzoic acid).
Orthochloroparanitroaniline (see 2-Chloro-4-nitroaniline).
Orthochlorophenol (see o-Chlorophenol).
Orthocresol (see o-Cresol).
Orthocresotinic acid (see 2,3-Creosotic acid).
Orthodichlorobenzene (see o-Dichlorobenzene).
Orthonitroaniline (see o-Nitroaniline).
Orthonitrochlorobenzene (see o-Nitrochlorobenzene).
Orthonitroparachlorophenol (see 2-Nitro-4-Chlorophenol).
Orthonitrophenol (see o-Nitrophenol).
Orthonitrotoluene (see o-Nitrotoluene).
Orthophenetidine (see o-Phenetidine).
Orthophenylphenol (see o-Phenyl phenol).
Ortho-tertiary amylphenol (see o-tert-Amylphenol).
Orthotolidine (see o-Tolidine base).
Orthotoluidine (see o-Toluidine).
Ouabain, USP, bots. gram. 3.00 - 4.00
Ouricury wax, crude, bgs. lb. .53 - .55
Refd., pure, bgs. lb. .61 - .62
Oxalic acid, bgs., dms., c.l., works. lb. .18 - .18¼
bgs., dms., 10,000-lb. lots, works. lb. .18¼- .18¾
bgs., dms., smaller lots, works. lb. .19¼- .19¾
b-Oxynaphthoic acid, pigment manufacture, dms., frt. alld lb. .912 - —
Dyestuff manufacture, dms., same basis lb. 1.03 - 1.14
Oxyquinolin sulfate, cns., 100-lb. lots, works lb. 4.75 - 5.00
cns., smaller lots, works lb. 4.92 - 5.17

P

Palm oil, clarif., dms lb. .1440- .1540
tanks lb. .1160- —
Palm oil acid, dist., dms. lb. .15¾- .19¼
tanks lb. .13¾- .14¼

Palmarosa oil, cns. .....lb. 4.45 - 6.00
Papain, powd., bots. .....lb. 5.50 -10.00
Papaverine hydrochloride, nat. or syn., USP, cns., 25-oz. to 100-oz. lots..oz. 5.00 - —
cns., smaller lots.....oz. 5.05 - 5.20
Papaverine sulfate, nat. or syn., USP, cns..oz. 7.10 - 7.35
Paprika, Bulgarian, bgs. .....lb. .25 - —
Hungarian, bgs. .....lb. .29 - —
Spanish, bgs. .....lb. .34 - —
Yugoslavian, bgs. .....lb. .29 - —
Para-aminobenzoic acid (see p-Aminobenzoic acid).
Parachlorobenzoic acid (see p-Chlorobenzoic acid).
Paramethylphenylcinchonic acid (see Neocinchophen).
Paranitrobenzoic acid (see p-Nitrobenzoic acid).
Paratoluidinemetasulfonic acid (see p-Toluidine-m-sulfonic acid).
Para-aminophenol (see p-Aminophenol).
Parachloro-orthonitroaniline (see 4-Chloro-2 nitroaniline).
Para-anisidin (see p-Ansidine).
Parachloraniline (see p-Chloraniline).
Parachlorobenzaldehyde (see p-Chlorobenzaldehyde).
Parachlorophenol (see p-Chlorophenol).
Paracresol (see p-Cresol).
Paradibromobenzene (see p-Dibromobenzene).
Paradichlorobenzene (see p-Dichlorobenzene).
Para toner, red, bbls. .....lb. 1.21 - —
Chlorinated, kgs. .....lb. 1.36 - —
Paraffin, crude, scale, white, 123°-127°F., ASTM, tanks, refy. lb. .0653- —
Paraffin, fully refd., 122°-124°F., ASTM, tanks, refy..lb. .0765- —
125°-127°F., ASTM, tanks, refy. lb. .0765- —
130°-132°F., ASTM, tanks, refy. lb. .0765- —
132°-134°F., ASTM, tanks, refy. lb. .0765- —
135°-137°F., ASTM, tanks, refy. lb. .0765- —
AMP temperatures are an arbitrary 3°F. higher than ASTM.
Paraffin oil, pale, 100-110 vis., at 100°F., tanks east coast refy..gal. .14 - —
Paraffin wax (see Paraffin).
Paraformaldehyde, 91%, flake, bgs., c.l., frt. alld..lb. .10 - —
bgs., l.c.l., frt. alld.....lb. .12 - .13
91%, powd., bgs., c.l., ex whse.lb. .1715- —
bgs., l.c.l., ex whse.....lb. .1865- —
USP-X, fib. dms., c.l. .....lb. .19 - —
fib. dms., 1,000-lb. lots .....lb. .20 - —
fib. dms., smaller lots .....lb. .21½- —
Paraldehyde, tech., 98%, 55-gal. dms., t.l., dlvd..lb. .14 - —
55-gal. dms., l.c.l., dlvd....lb. .15 - —
tanks, dlvd. .....lb. .11½- —
Paranitroaniline (see p-Nitroaniline).
Paranitrochlorobenzene (see p-Nitrochlorobenzene).
Paranitrotoluene (see p-Nitrotoluene).
Paranitrophenol (see p-Nitrophenol).
Paraphenetidine (see p-Phenetidine).
Paraphenylenediamine (see p-Phenylenediamine).
Paraphenylphenol (see p-Phenylphenol).
Para-tertiary-amylphenol (see p-tert-Amylphenol).
Para-tertiary butylphenol (see p-tert-Butylphenol).
Parathion, ethyl, dms., frt. alld..lb. .84 - —
Parathion prices 2c. per lb. higher in West.
Paratoluenesulfonamide (see p-Toluenesulfonamide).
Paris green, dealers, 100 lb. dms., frt. alld..lb. .45 - —
Passion flower herb, bls. .....lb. .45 - .50
Patchouli oil, imp., cns. .....lb. 5.50 - 6.50
Peach kernel oil, USP (see Apricot kernel oil).
Peacock blue, fugitive, 100% color strength, 250-lb. bbls., dlvd. E. of Rockies....lb. 1.00 - —
Peacock blue price 1c. higher W. of Rockies.
Peanut meal, old process, 45%, bgs., f.o.b. mills..ton.55.00 Nom.
solvent, same basis .....ton.50.00 Nom.
Peanut oil, crude, tanks, f.o.b. mills. lb. .16¼- —
Refd., dms. .....lb. .21½- .21¾
tanks .....lb. .19½- —
Pectin, dom., NF, citrus, powd., bbls. lb. 2.05 - 2.06
Dom., tech., powd., 150 jelly grade, bbls..lb. 1.28 - —
Imp., Danish, bbls., ex whse....lb. 1.28 - —
Pelargonic acid, dms., c.l., dlvd..lb. .25 - —
ton lots, same basis .....lb. .27½- —
tanks, same basis .....lb. .23½- —
Penicillin, potassium, cryst., bulk, 1,000,000 units. .021 - —
Penicillin, procaine, cryst., bulk, 1,000,000 units. .023 - —
Pennyroyal oil, USP, imported, cns. lb. 1.95 - 2.25
Pentachlorophenol, bgs., c.l., t.l., works, frt. equald..lb. .21 - —
bgs., l.c.l., same basis.....lb. .22½- .29
Pentachlorophenol in dms. 1c. higher.
Pentaerythritol, tech., bgs., c.l., dlvd..lb. .31 - —
bgs., l.c.l., dlvd. .....lb. .32 - —
Pentaerythritol, di- and tri-isomers (see Dipentaerythritol and Tripentaerythritol).
Pentane, indust., tanks, Tex. refy. gal. .14 - —
Pentobarbital, dms., 100 lbs. or more..lb. 6.00 - —
Pepper, black, Malabar, bgs.....lb. .60 - —
Lampong, bgs. .....lb. .60 - —
Red, Funtuas, bgs. .....lb. .32 - —
Japanese, Hontoka, bgs. ....lb. .37½- —
Santaka, bgs. .....lb. .31½- —
Sudanese, bgs. .....lb. .36 - —
White, Muntok, bgs.....lb. .80 - —
Peppermint leaves, dom., USP, bls., dms..lb. .70 - .75
Imp., USP, bls. .....lb. .85 - —
Peppermint oil, nat., dms. .....lb. 4.00 - 4.60
Redist., USP, dms. .....lb. 4.25 - 5.25
Perchloroethylene, dms., c.l., or t.l., dlvd..lb. .13½- —
dms., l.c.l., dlvd. .....lb. .15¼- —
tanks, dlvd. .....lb. .11¾- —
tanktruck, 1,000 gal. min. dlvd..lb. .12¼- —
Peri acid, dry, bbls., frt. alld....lb. 1.60 - —
Paste, bbls., frt. alld.....lb. 1.55 - —
Peru balsam, dms. .....lb. 1.10 - 1.50
Persic oil, USP (see Apricot kernel oil).
Petitgrain oil, South American, cns., dms..lb. 2.40 - —
Petrolatum, cream, dms., c.l., refy. lb. .08125- —
dms., l.c.l., dlvd. .....lb. .10125-.11375
tanks, refy. .....lb. .05875- —
Extra amber, dms., c.l., refy..lb. .07125- —
dms., l.c.l., dlvd. .....lb. .09125-.10375
tanks, refy. .....lb. .04875- —
Petrolatum, lily white, dms., c.l., refy..lb. .08625- —
dms., l.c.l., dlvd. .....lb. .10625- .13
tanks, refy. .....lb. .06735- —
USP, snow white, dms., c.l., refy. lb. .09125- —
dms., l.c.l., dlvd..lb. .11125- .135
tanks, refy. .....lb. .06875- —

Petrolatum, USP, soft yellow, dms., c.l., refy..lb. .07125- —
dms., l.c.l., dlvd. .....lb. .095 - .10375
tanks, refy. .....lb. .04875- —
Petroleum pitch (see Asphalt, petroleum).

PETROLEUM PRODUCTS
Petroleum product quotations are listed individually. For example, prices on Petroleum, mineral spirits, may be found in the M's under Mineral spirits, petroleum.

Petroleum sulfonate, oil soluble, 60-62% sulfonic content, non-ret. dms., c.l., works. lb. .16½- .18¾
non-ret. dms., l.c.l., works lb. .17½- .19
tanks, works .....lb. .14½- .17
50-55%, sulfuric content, non-ret. dms., c.l., works..lb. .16 - —
non-ret. dms., l.c.l., works..lb. .17 - —
tanks, works .....lb. .13 - —
o-Phenetidine, dms., c.l., frt. alld. E..lb .91 - —
dms., l.c.l., same basis.....lb. .93 - —
p-Phenetidine, dms., c.l., frt. alld. lb. 1.05 - —
dms., same basis .....lb. 1.08 - —
Phenobarbitol, USP, dms., 100-lbs., frt. alld..lb. 3.25 - —
Phenobarbital-Sodium (see sodium phenobarbital).
Phenol, 90-92% (cresol 8-10%), non-ret. dms., frt. alld. E. of Rockies..lb. .16¾- —
non-ret. dms., l.c.l., same basis. lb. .17¾- —
tanks, same basis .....lb. .14¾- —
82-84% (cresol 16-18%) non-ret. dms., c.l., same basis..lb. .16½- —
non-ret dms., l.c.l., same basis. lb. .17½- —
tanks, same basis .....lb. .14½- —
30°C., or above, tar dist., non-ret. dms., c.l., same basis lb. .18 - —
Phenol, 30°C., or above, tar dist., non-ret. dms., l.c.l., same basis. lb .19 - —
tanks, same basis.....lb. .16 - —
USP, syn., dms., c.l., t.l., frt. alld..lb. .18½- —
dms., same basis.....lo. .20½- —
tanks, same basis.....lo. .16½- —
Phenolphthalein, USP or yellow, 250-lb. dm., 2,000 lbs., frt. alld..lb. 1.30 - —
250-lb. dm., same basis.....lb. 1.35 - —
Phenothiazine drench, fib. dms., t.l., dlvd..lb. .44 - —
fib. dms., l.t.l., same basis..lb. .47 - —
NF, fib. dms., t.l., same basis..lb. .43 - —
fib. dms., l.t.l. same basis..lb. .46 - —
Phenyl acetate, dms., 100-lb. lots, works..lb. .50 - —
Phenyl salicylate (see Salol).
Phenylacetaldehyde, soln., 50%, bots. lb. 2.35 - —
100%, bots. .....lb. 4.00 - 4.65
Phenylacetic acid, pure, cryst., cns. lb. 1.25 - 1.75
dl-Phenylalanine, dms., works...lb.27.00 -37.50
l-Phenyl-3-carbethoxy pyrazolone-5, fib. dms., 200-lb. lots, dlvd. E..lb. 3.45 - —
fib dms., smaller lots, dlvd. E..lb. 3.80 - —
N-Phenyldiethanolamine, dms., c.l., dlvd. E..lb. .41 - —
dms., l.c.l., dlvd. E. .....lb. .42½- —
tanks, dlvd. E. .....lb. .38½- —
m-Phenylenediamine, dms., frt. alld. lb. 1.10 - —
o-Phenylenediamine, coml, fib. dms, 100 to 1,000 lbs., works. lb. 1.70 - 1.80
p-Phenylenediamine, tech., dms, works..lb. 1.55 - —
Phenylethanolamine, dms., c.l., works..lb. .75½- —
dms., l.c.l., same basis.....lb. .77 - —
Phenylethyl acetate, bots. .....lb. 1.25 - 1.40
2-Phenylethyl alcohol, extra, dms.lb. 1.14 - 1.50
Standard, dms. .....lb. 1.10 - 1.60
b-Phenylethylamine, dms., 20,000 lbs. or more, frt. alld..lb. 1.50 - —
dms., smaller lots, frt. alld....lb. 1.70 - 1.85
Phenylethylphenyl acetate, bots..lb. 4.00 - 4.25
Phenylglyconic acid (see Mendelic acid).
Phenylhydrazine, 97%, 450-lb. dms.lb. 1.45 - —
1-Phenyl-3-methyl pyrazolone-5, fib. dms., 250-lb. lots, dlvd. E. 1.80 - —
fib. dms., smaller lots, dlvd. E..lb. 2.10 - —
o-Phenylphenol, dms., l.c.l., works. lb. .48 - .50
p-Phenylphenol, bgs., c.l., works..lb. .38½- —
bgs., l.c.l., works .....lb. .43 - —
Philippine copal gum, pale, chips, bgs..lb. .23¾- .26
nubs, bgs. .....lb. .33¼- .37
seeds, bgs. .....lb. .20 Nom.
sorts, bgs. .....lb. .20 - .24
Phloroglucinol, coml., fib. dms., works..lb. 6.40 - —
CP, bots., works.....lb.17.75 - —
Tech., fib dms., works.....lb.10.45 - —
Phloxin red toner (see Eosin red toner).
Phosgene, ret. cyls., works.....lb. .15¼- —
Phosphate, defluorinated (see under D).
Phosphate rock, Curacao, Atlantic ports, New Orleans..ton.48.00 - —
Phosphate rock, Florida, land pebble, run-of-mine, washed, dried, unground, 66-68%, b.p.l., bulk, c.l., mines. short-ton. 5.298 - —
68-70%, b.p.l., bulk, c.l., same basis..short-ton. 5.648 - —
70-72%, b.p.l., bulk, c.l., same basis..short-ton. 6.228 - —
74-75%, b.p.l., bulk, c.l., same basis..short-ton. 7.128 - —
76-77%, b.p.l., c.l., bulk, same basis..short ton. 8.018 - —
Above Florida prices are based on fuel oil at $2.37 per bbl. and labor at $1.59.
Phosphoric acid, food grade, 75%, cbys., c.l., works, E., frt. equald..100 lbs. 7.00 - —
cbys., l.c.l., same basis..100 lbs. 7.25 - 7.75
tanks, t.w., works....100 lbs. 5.60 - —
80%, cbys., c.l., frt. equald..100 lbs. 7.85 - —
cbys., l.c.l., works....100 lbs. 8.10 - 9.35
tanks, t.w., works....100 lbs. 6.00 - —
NF, 85%, cbys., c.l., works.100 lbs. 9.50 - —
cbys., l.c.l., works....100 lbs. 8.75 - 9.00
tanks, t.w., works....100 lbs. 6.65 - —
Phosphorus, amorph., red, dms., t.l., works..lb. .55 - —
dms., smaller lots, works..lb. .56 - .57
white (yellow), solid, dms., c.l., works, frt. equald..lb. .20 - .20½
dms., l.c.l., works, frt. equald..lb. .21½- —
tanks, works, frt. equald. lb. .19 - —
Phosphorus oxychloride, dms., c.l., works..lb. .14 - —
dms., l.c.l., works .....lb. .15 - —
tanks, works, frt. equald....lb. .12½- —
Phosphorus pentasulfide, powd., dms., c.l., works..lb. .13½- —
dms., l.c.l., works.....lb. .14½- .15½
Solid, dms., c.l., works.....lb. .11½- —
dms., l.c.l., works.....lb. .12½- .13½

Phosphorus pentoxide, dms., c.l., works..lb. .1373- .1473
dms., l.c.l., works .....lb. .1475- .1675
Phosphorus sesquisulfide, dms., cs., c.l., works..lb. .38 - —
dms., l.c.l., works.....lb. .39 - .40
Phosphorus trichloride, dms., c.l., works..lb. .14 - —
dms., l.c.l., works.....lb. .15 - —
tanks, works .....lb. .12½- —
Phthalic anhydride, bgs., c.l., works, frt. equald..lb. .19 - .23
bgs., l.c.l., same basis.....lb. .20 - .24
tanks, same basis .....lb. .18½- .22½
Phthalimide, 97-98%, dms., frt. alld..lb. .63 - —
Phthalocyanine blue, full strength, bbls., dlvd. E. of Rockies. lb. 2.90 - —
Resinated, bbls., same basis....lb. 2.75 - —
Water dispersable, bbls., same basis..lb. 1.52 - —
Pythalocyanine blue prices 1c. higher W. of Rockies.
Phthalocyanine green toner, bbls., works..lb. 3.35 - —
Resinated, bbls. .....lb. 3.00 - —
Water dispersable, bbls. .....lb. 1.71 - —
Phthalocyanine green prices 1c. higher W. of Rockies.
Phthalylsulfacetamide, fib. dms., 1,000-lb. lots or more..lb. 5.00 - —
NF, fib. dms. .....lb. 5.20 - —
a-Picoline, dms., c.l., works, frt. equald..lb. .42 - .45
dms., l.c.l., works, frt. equald..lb. .422 - .46½
tanks, same basis.....lb. .41½- .43
b-Picoline, 98%, dms., t.l., works. lb. 1.05 - —
dms., l.c.l., same basis.....lb. 1.15 - —
tanks, same basis .....lb. .95 - —
b,g-Picoline, 5°C, dms., c.l., works. lb. .32½- —
dms., l.c.l., works.....lb. .33 - —
g-Picoline, dms., f.o.b., works..lb. 1.60 - —
tanks, t.l., same basis.....lb. 1.50 - —
Picric acid, NF, bbls. .....lb. .85 - —
Tech., bbls. .....lb. .44 - —
Pigment green B, kgs. .....lb. 1.50 - —
Pilocarpine hydrochloride, USP, bots..oz. 5.25 - —
Pilocarpine nitrate, USP, bots., vials. oz. 5.15 - —
Pimento, Jamaican, bgs. .....lb. .68 - —
Mexican, bgs. .....lb. .57 - —
Pimento berry oil, NF, dms. ....lb. 3.75 - 9.25
Pimento leaf oil, crude, cns. ....lb. 2.20 - 2.60
Pine oil, dest.-dist., dms., l.c.l. works..lb. .15 - —
dms., l.c.l. ex whse. New York. lb. .173 - —
Steam-dist., dms., ex whse., New York..lb. .185 - —
dms., dlvd. .....lb. .188 - —
Pineneedle oil, Siberian (see Abies Siberoca oil).
Pink root, bls. .....lb. 1.75 - —
Piperazine, anhyd., dms., c.l., frt. alld..lb. 1.80 - —
dms., l.c.l., same basis.....lb. 1.85 - —
Piperazine citrate, 36%, dms., 1,000 lbs. or more, frt. alld..lb. 1.13 - —
Piperazine dihydrochloride, 51%, dms., 1,000 lbs. or more, frt. alld..lb. 1.23 - —
Piperazine hexahydrate, 44%, dms., 1,000 lbs or more, frt. alld lb. .86 - —
dms., 200-900 lbs., frt. alld....lb. .89 - —
Piperazine phosphate, 42%, dms., 1,000 lbs. or more, frt. alld..lb. 1.06 - —
Piperidine, dist., 98% min., dms., c.l., t.l., frt. equald....lb. 2.55 - —
Piperonyl butoxide, dms., dlvd. E.lb. 4.50 - 5.05

PITCHES
Pitch quotations are listed individually For example, prices on Pitch, soybean, may be found in the S's under Soybean pitch.

Plaster of Paris (see Gypsum).
Platinum metal, works.....oz.81.00 -85.00
Pleurisy root, bls. .....lb. .45 - .50
Podophyllum resin, NF, dms. ....lb.12.50 - —
Poke root, bls. .....lb. .19 - .22
Polymyxin, bots., bulk., 50 billion units or more..1,000,000 units. .52 - —
bulk, bots., 25-50 billion units. 1,000,000 units. .54 - —
bulk, bots., 1-25 billion units. 1,000,000 units. .56 - —
Polyoxyethylene sorbitan monostearate, dms., 20,000-lb. lots, works..lb. .42 - —
dms., 10,000-20,000-lb. lots, works. lb. .44 - —
dms., smaller lots, works.....lb. .47 - .49
Polyoxyethylene sorbitan tristearate, dms., 20,000-lb. lots, works..lb. .42 - —
dms., 10,000-20,000-lb. lots, works..lb. .44 - —
dms., smaller lots, works.....lb. .47 - .49
Pontianak copal gum, chips, bgs..lb. .25 - —
Nubs, bgs. .....lb. .37 - .40
Poppy seed, Argentine, bgs. ....lb. No stocks.
Dutch, bgs. .....lb. .18 - —
Danish, bgs. .....lb. .17 - —
Polish, bgs. .....lb. .18 - —
Turkish, bgs. .....lb. .14 - —
Potash, caustic, liq., 45% basis, dms., c.l., works..100 lbs. 4.25 - —
dms., l.c.l., same basis 100 lbs. 5.05 - —
tanks, same basis.....100 lbs. 3.70 - —
reg., flake, 88-92%, dms., c.l., same basis..100 lbs. 9.55 - —
reg., flake, 88-92%, dms., l.c.l., same basis..100 lbs.10.60 - —
solid, 88-92%, dms., c.l., works. 100 lbs. 9.10 - —
dms., l.c.l., works....100 lbs.10.15 - —
Potassium acetate, NF, 200-lb. dm., f.o.b. works, E..lb. .31 - —
Potassium bicarbonate, USP, gran. dms..lb. .22 - —
powd., dms. .....lb. .24 - —
Potassium bichromate, gran., bgs., c.l., t.l., works..lb. .18 - —
bgs., l.c.l., works .....lb. .18½- .19¼
Potassium bichromate in dms. ¾c. higher.
Potassium bitartrate, NF, gran., powd., 100-lb. bgs., c.l., frt. equald..lb. .37 - —
100-lb. bgs., 5,000 lbs., 1 shipt., same basis..lb. .38 - —
100-lb. bgs., smaller lots, same basis..lb. .40 - —
Potassium borohydride, powd., dms., works..lb.16.00 -22.00
Pelletized potassium borohydride $1.25 per lb. higher in 1,000-lb. lots.
Potassium bromate, dms., 1,000-lb. lots or more, works..lb. .50 - —
dms., smaller lots, works.....lb. .52 - .62
Potassium bromide, USP, gran., bbls., kgs..lb. .39 - .40

Potassium carbonate, dom., NF, gran., bbls., dms..lb. .20 - —
Dom., tech., powd., bbls., dms..lb. .21 - .22
Dom., calcinated, bgs., c.l., works. 100 lbs. 8.50 - —
bgs., l.c.l., same basis..100 lbs. 9.55 - —
Dom., hydrated, 83-85%, bgs., c.l., works..100 lbs. 7.10 - —
bgs., l.c.l., works....100 lbs. 8.15 - —
Potassium chlorate, cryst., dms., c.l., works..lb. .12¼- —
dms., l.c.l., works .....lb. .13½- .14¼
Powd., dms., c.l., works.....lb. .12¾- —
dms., l.c.l., works.....lb. .14 - .15
works..lb. .12¼- —
Potassium chlorate, NF, cryst., dms., 2,000 lbs. or more, works..lb. .16¾- —
NF, gran., 25-lb. metal dms....lb. .36 - —
NF, powd., dms., 2,000 lbs. or more, works..lb. .17¼- —
Potassium chloride, indust., 99.9% KCL, bulk, c.l., works..ton.29.00 - —
bgs., c.l., works.....ton.33.50 - —
99.3% KCL, bulk, c.l., works.ton.28.00 - —
bgs., c.l., works .....lb.32.50 - —
USP, cryst., dms. .....lb. .20 - .22
USP, gran., dms. .....lb. .21 - .23
USP, powd., dms. .....lb. .24 - .26
Potassium chloride agricultural (see Potassium muriate).
Potassium chromate, tech., dms., works..lb. .50 - .51
Potassium citrate, NF, gran., 250-lb. dms., f.o.b. works E..lb. .43 - —
powd., 250-lb dms., same basis. lb. .46 - —
Potassium cyanide, dms., 20,000-lb. lots or more, works....lb. .42½- —
dms., 2,000-19,999-lb. lots, works. lb. .43 - —
dms., smaller lots, works.....lb. .44 - .44½
Potassium dichromate (see Potassium bichromate).
Potassium ferricyanide, dms., ton lots, works..lb. .50 - —
dms., smaller lots, works .....lb. .65 - —
Potassium ferrocyanide, dms., ton lots..lb. .24½- —
dms., smaller lots .....lb. .29 - —
Potassium fluoborate, fib. dms., c.l., works..lb. .30 - —
fib. dms., l.c.l., works.....lb. .31 - —
Potassium fluoride, dms., works..lb. .37 - .38
Potassium gluconate, 100-lb. dm., f.o.b. works E..lb. 1.67 - —
Potassium guaiacol sulfonate, NF, dms..lb. 2.10 - 2.30
Potassium hydroxide, tech. (see Potash caustic).
Potassium hydroxide, USP, pellets, 100-lb. dms., 1 to 100-dm. lots..lb. .33½- .36
Potassium hypophosphite, NF, fib. dms., 1,000-lb. lots..lb. 1.38 - —
Potassium iodide, USP, cryst., gran., or powd., 250-lb. dm., f.o.b. works..lb. 1.40 - —
Potassium manure salt, min. 20% K_2O, bulk, c.l., works. unit-ton. .17 - .1768
Potassium metabisulfite, gran., dms., lb. .16 - —
Powd., dms. .....lb. .27 - —
Potassium muriate, standard, bulk, c.l., works..unit-ton. .33 - .35
bagged 60% minimum K_2O, same basis..ton.24.80 -26.00
Gran., bulk, c.l., works..unit-ton. .34 - .36
bagged, 60% minimum K_2O, same basis..ton.25.40 -26.40
Inside prices apply to material contracted for prior to July 1, 1959.
Outside prices apply to material contracted for after that date but also for delivery during the current month.
Potassium nitrate, NF, cryst., bbls., 20-ton lots..100 lbs.17.00 - —
bbls., smaller lots....100 lbs.18.00 -19.00
gran., bgs., 20-ton lots..100 lbs. 9.50 - —
bgs., smaller lots.....100 lbs.11.00 -12.00
powd., bgs., 20-ton lots..100 lbs.10.50 - —
bgs., smaller lots....100 lbs.12.00 -13.00
Potassium oxalate, neutral, tech., fine gran., powd., 300-lb. dm., f.o.b. works E..lb. .32 - —
Potassium pentaborate, gran., dms., c.l., works..ton.219.50 - —
dms., ton lots, ex whse....ton.311.00 - —
dms., smaller lots, ex whse..ton.316.00 - —
Powdered potassium pentaborate $10 per ton higher.
Potassium perchlorate, dms., c.l., works..lb. .18½- —
dms., l.c.l., works .....lb. .19 - .20
Potassium permanganate, coml., kgs., works..lb. .25 - .33
USP, dms., works.....lb. .29 - .35
Potassium persulfate, dms., c.l., works..lb. .17½- —
dms., l.c.l., works .....lb. .18 - .21
Potassium pyrophosphate, tetrabasic, dms., works..lb. .15½- .18½
Potassium prussiate red (see Potassium ferrocyanide).
Potassium prussiate yellow (see Potassium ferro-cvanide).
Potassium silicate, electrical grade, 30° Be, 1:2.0, dms., c.l., works..100 lbs. 6.50 - —
dms., l.c.l., 5 dm. lots or more, works.....100 lbs. 7.25 - 7.65
tanks, works.....100 lbs. 6.13 - —
Potassium silicate, electrical grade, 40.5° Be, 1:2.1, dms., c.l., works..100 lbs. 5.95 - —
dms., l.c.l., 5 dm. lots or more, works..100 lbs. 6.70 - —
tanks, works.....100 lbs. 5.60 - —
Potassium silicate, glass grade, bgs., c.l., works..100 lbs.17.30 -18.00
bgs., l.c.l., works.....100 lbs.17.80 - —
Soln., 29° Be, 1:2.5, dms., c.l., works..100 lbs. 4.95 - —
dms., l.c.l., 5-dm. lots or more, works..100 lbs. 5.70 - —
tanks, works .....100 lbs. 4.60 - —
Potassium silicofluoride, bgs., works. lb. .09½- .10
Potassium silicofluoride in drums, 0.4c. per lb. higher.
Potassium stannate, dms., frt. alld. E..lb. .784 - .857
Potassium sulfate, min. 50% K_2O, agricultural, bulk, c.l., works..unit-ton. .62½- .64¼
Inside price applies to tonnage contracted for prior to July 1, 1959.
Outside price applies to tonnage contracted for after that date but also for delivery during the current month.

Potassium Sulfate—Salt

Potassium sulfate, NF VII, cryst., dms., lb. .31 - .33
NF VII, gran., dms. lb. .18½- —
NF VII, powd., dms. lb. .16 - .17
Potassium sulfocyanate, NF, cryst., (see Potassium thiocyanate).
Potassium thiocyanate, NF, cryst., dms., works lb. .96 - .98
Tech., dms., works lb. .77 - .79
Potassium titanate, ctns., c.l., works. lb. .16¼- —
ctns., 5-ton lots, works lb. .16½ —
ctns., 1-ton lots or less, works lb. .16¾- —
Potassium-magnesium sulfate, basis 40% K_2SO_4 and 18% MgO, bulk, works, base price. ton.13.45 - —
bulk, works, July forward ton.14.00 - —
Potassium-sodium tartrate, NF, gran. or powd., 250-lb. dms., c.l., works E lb..42½- —
250-lb. dms., 5,000-lb. lots, same basis lb. .43 - —
250-lb. dms., same basis lb. .43½- —
Potassium-titanium fluoride, fib. dms., works lb. .39 - .40
Potassium-zirconium flouride, fib. dms., c.l., works lb. .50 - —
fib. dms., l.c.l., works lb. .52½- .55
Pregnenolone, bots. gram. No prices.
Pregnenolone acetate, bots. gram. No prices.
Procaine hydrochloride, USP, antibiotic grade, dms., 2,000-lb. lots, frt. alld lb. 2.25 - —
USP, ampule grade, dms., 1,000-lb. lots, frt. alld lb. 2.40 - —
dms., 500 lbs. lb. 2.45 - —
dms., 100 lbs. lb. 2.50 - —

Progesterone, USP, bots. gram. No prices.
Pregnenolone acetate, bots. gram. No prices.
Propenyl guaethol, dms. lb.24.30 -27.00
b-Propriolactone, dms., c.l., t.l., f.o.b. works lb. .89 - —
dms., l.c.l., l.t.l., same basis lb. .90 - —
tanks, same basis lb. .87 - —
Propionic acid, syn., pure, dms., c.l., works lb. .23¼- —
dms., l.c.l., works lb. .24¾- —
tanks, works lb. .20¾- —
n-Propyl acetate, dms., c.l., dlvd. lb. .14¾- —
dms., l.c.l., dlvd lb. .16¼- —
tanks, dlvd. lb. .12¼- —
n-Propyl alcohol, dms., c.l., dlvd. lb. .14 - .15
dms., l.c.l., dlvd lb. .15½- .16¼
tanks, dlvd. lb. .11½- .12½
n-Propyl gallate, dms., 100 to 2,000-lb. lots, works lb. 3.90 - 4.40
n-Propyl-p-hydroxbenzoate, USP, dms. lb. 2.30 - 2.40
Propyl thiouracil, bots., 50 kilo lots or more kilo.55.00 - —
bots., smaller lots kilo.55.10 -55.30
n-Propylamine, dms., c.l., dlvd. lb. 1.24 - —
dms., l.c.l., same basis lb. 1.255 - —
n-Propylene dichloride, consumers', dms., c.l., dlvd. E. lb. .0845- —
dms., l.c.l., same basis lb. .0995- —
tanks, same basis lb. .07 - —
Propylene dichloride prices in West 1c. higher, same basis.

Propylene glycol, indust., dms., c.l., dlvd. E. lb. .15 - —
dms., l.c.l., same basis lb. .16¾- —
tanks, same basis lb. .12½- —
USP, dms., c.l., dlvd. E. lb. .17 - —
dms., l.c.l., same basis lb. .18¾- —
Propylene glycol methyl ether, dms., c.l., dlvd. lb. .20 - —
dms., l.c.l., same basis lb. .21 - —
tanks, same basis lb. .18½- —
Propylene oxide, dms., c.l., dlvd. E. lb. .17 - —
dms., l.c.l., dlvd. E. lb. .18½- —
tanks, dlvd. E. lb. .14½- —
Psyllium seed, black, bgs. lb. .30 - .35
Blonde, bgs. lb. .18 - .20
Husks, bgs. lb. .42 - .45
Pumice, dom., grd., coarse to fine, 0, ½, 1, 1½, 2, 3, bgs., ton lots lb. .03¾- .04¼
bgs., smaller lots lb. .03⅞- —
Imp., Italian, silk-screen, coarse, bgs, ton lots lb. .06½- —
fine, bgs., ton lots lb. .04 - —
sun dried, coarse, bgs. ton.60.00 - —
fine, bgs. ton.60.00 -70.00
Pumpkin seed, bgs. lb. .25 - .26
Pyrethrins, syn. (see Allethrin).
Pyrethrum flowers, fine grd., 0.9% pyrethrins, bgs., ton, works lb. .50 - —
Powd., 1.3% pyrethrins, bgs., ton, works lb. .71 - —
Pyrethrum liquid, 20/1 basis (2 grams pyrethrins per 100cc odorless base), dms., works, gal. 9.60 - 9.80
Pyrethrum liquid, 100/1 basis (10 grams pyrethrine per 100cc odorless base), dms., works gal.45.90 -46.90
Pyrethrum oleoresin, dewaxed, 20%, dms., works lb.11.00 -11.35
purif, 20%, dms., works lb.11.00 -11.35

Pyridine, denat., dms., c.l., works and frt. equald. gal. 2.55 - —
dms., l.c.l., same basis gal. 2.70 - —
Refd., 2°, non-ret. dms., c.l., same basis lb. .69½- —
dms., l.c.l., same basis lb. .70 - —
tanks, same basis lb. .65 - —
Pyridoxine hydrochloride, USP, 500-gram bots., dms., f.o.b. works kilo.175.00 - —
Pyrites, Canadian, 48-50% S, mines, long-ton. 5.00 - 6.00
Pyrocatechol (see Catechol).
Pyrogallic acid, NF (see Pyrogallol).
Pyrogallic acid, tech., bbls., 100-lbs., f.o.b., works lb. 3.50 - —
Pyrogallol, NF, 100-lb. dms. lb. 3.50 - —
Pyroxylin, USP, bots. lb. 9.50 - —

Q

Quassia chips lb. .10 - —
Quicksilver (see Mercury metal).
Quince seed, bgs. lb. 1.30 - 1.40
Quinidine sulfate, USP, 1,000-oz. dm oz. .74½- —
Quinine, NF, 1,000-oz. dm. oz. .3105- —
Quinine bisulfate, USP, 1,000-oz. dm. oz. .2330- —
Quinine hydrochloride, 1,000-oz. dm. oz. .3030- —
Quinine sulfate, USP, 1,000-oz. dm. oz. .2575- —
Quinoline, dms., c.l., frt. equald. lb. .50¾- —
dms., l.c.l., same basis lb. .51¼- —
tanks, same basis lb. .50 - —

R

R salt paste, dms., frt. alld., 100% basis lb. .98 - —
Powd., frt. alld. 100% basis lb. 1.08 - —
Rapeseed oil, dms. lb. .15 - .15½
tanks lb. .13 - —
Rare earth oxalate, NF, 45-50%, bgs, works lb. 1.15 - —
Rauwolfia serpentina root, powd., bbls., dms lb. 1.00 - 1.20
Red carmine, No. 40 (see Carmine).
Red oil (see Oleic acid).

RED PIGMENTS
Red pigment quotations are listed individually. For example, prices on Red, lithol toner, may be found in the L's under Lithol red toner.

Red precipitate (see Mercuric oxide, red).
Red toner, Lake C, alizanine, bbls., works lb. 1.25 - —
Reserpine, cryst., bots. gram. 1.25 - —
Resorcinol, tech grade, dms., c.l., works, frt. equald. lb. .77¼- —
dms., l.c.l., same basis lb. .78½- —
USP, powd., dms., works lb. 2.95 - —
Resorcinol monoacetate, NF, dms. lb. 2.50 - —
Rhatany root, bgs. lb. .14 - .16
Rhodamine red toner, molybdated, PMA, kgs., works lb. 6.00 - —
Tungstated, PTMA, works, kgs. lb. 6.60 - —
Rhodinol, 5-lb. cans lb.42.00 -51.00
Synthetic lb.14.00 -16.00
Rhubarb root, India, whole, bgs. lb. .25 - —
powd., bgs. lb. .35 - —
tanks, same basis lb. .14½- —
Riboflavin, USP, fib. dms., kilo or more, dlvd kilo.36.00 - —
Riboflavin, USP, readily soluble, lots, dlvd kilo.13.00 - —
Riboflavin, 5-phosphate-sodium, fib. dms., kilo or more, dlvd. kilo.104.50 - —
Rice bran oil, clarified, dms., l.c.l. lb. .14 - .14¼
tanks, dlvd. E. lb. .12 Nom.
Ricinoleic acid (see Castor oil acids split).
Rochelle salt (see Potassium-sodium tartrate)
Roofing pitch (see Coaltar pitch roofing).
Rose oil, nat., Bulgarian, bots. lb.1,152.00- —
Turkish, bots. lb.560.00 -750.00
Rosemary oil, Spanish, NF, cns., dms. lb. .97 - 1.40
Spanish, tech., cns., dms. lb. .50 - 1.20
Rosin gum and wood (see Naval Stores in Protective Coatings market).
Rotenone, fib. dms., works unit-lb. .12 - —
Resin, 25-45%, fib. dms., works, unit-lb. .12 - —
Rottenstone, bgs., 5-ton lots, ex-whse lb. .03¾- —
bgs., ton lots, same basis lb. .04¼- —
Rubber solvent, petroleum, 115°F-245°F b.r., tankcars, New Jersey and New York gal. .19 - —
Group 3 gal. .13875- —
Houston, Texas gal. .155 - —
Rue oil, bots. lb. 2.75 - 3.00
Rutin, NF, fib. dms., 10 kilo lots. kilo.13.00 - —
fib. dms., 5 kilo lots kilo.13.50 - —
fib. dms., 1 kilo kilo.14.00 - —
Ryania, 100%, powd., bgs., c.l., works lb. .22 - —
bgs., l.c.l., same basis lb. .24 - —

S

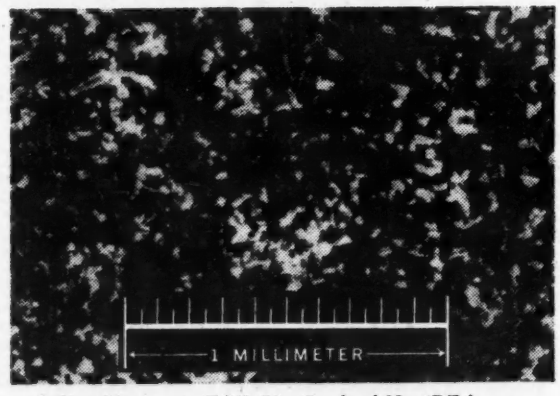
S acid, bbls., works lb. 3.25 - —
Sabadilla seed, activated, ground with lime, bbls lb. .42 - .44
Saccharin, calcium, fib. dms., 1,000-lb. lots, works lb. 2.50 - —
USP, gran., soluble, dms., 1,000-lb. lots lb. 1.40 - —
dms., smaller lots lb. 1.50 - —
USP, powd., soluble, insoluble, dms., 1,000-lb. lots lb. 1.45 - —
dms., smaller lots lb. 1.55 - —
Saccharin, USP, powd., insoluble, dms., 1,000-lb. lots lb. 1.43 - —
dms., smaller lots lb. 1.53 - —
Safflower oil, dms., New York lb. .1755- .18
tanks, Atl. Coast lb. .1555- —
Saffron, Mancha Superior, tins lb.20.50 - —
Safrol, dms. lb. .65 - —
Sage, Dalmatian, bgs. lb. .40 - —
Greek, cns. lb. .15 - —
Italian, cns. lb. .18 - —
Sage oil, clary, bots. lb.15.50 -17.00
Dalmatian, cns. lb. 2.85 - 3.25
Spanish, cns. lb. 1.25 - 1.75
Sal soda (see Soda ash).
Salicylaldehyde, dms., c.l., t.l., f.o.b., plant, frt. equald. lb. 1.23 - —
dms., l.c.l., same basis lb. 1.25 - —
Salicylamide, 100-lb. dms lb. 1.65 - —
Salicylic acid, tech., fib. dms., c.l., t.l., dlvd. lb. .40¼- —
fib. dms., l.c.l., dlvd lb. .44¾- —
Salicylic acid, USP, cryst., 200-lb. fib. dms., 1,000 lbs. or more lb. .51¾- —
200-lb. fib. dms., less than 1,000 lbs. lb. .54¾- —
100-lb. fib. dms., 1,000 lbs. or more lb. .53¾- —
100-lb. fib. dms., less than 1,000 lbs lb. .56¾- —
USP, powd., 100-lb. fib. dms., 1,000 lbs. or more lb. .58¾- —
100-lb. fib. dms., less than 1,000 lbs. lb. .61¾- —
Salol, NF, gran., bbls., kgs. lb. 1.20 - —
Powdered salol, 25c. per lb. higher.
Salt, rock, paper bgs., c.l. 100 lbs. 1.09 - —

Get Sodium Bicarbonate in the grain size you need **every time...**
FROM CHURCH & DWIGHT

Sodium Bicarbonate U.S.P. Powdered No. 1—For general purpose use in chemical processing, dyestuffs, adhesives, starches, textiles and industrial applications.

TYPICAL SCREEN ANALYSIS
CUMULATIVE PERCENT RETAINED BY

42 Mesh.....Trace | 200 Mesh.....35.0%
100 Mesh.....5% | 325 Mesh.....70.0%
170 Mesh.....20.0% | 400 Mesh.....80.0%



Sodium Bicarbonate U.S.P. Fine Powdered No. 3DF for use specifically in dry powder fire extinguisher mixes, also in rubber and plastics blowing, lubricant for sheet vinyl.

TYPICAL SCREEN ANALYSIS
CUMULATIVE PERCENT RETAINED BY

170 Mesh.....Trace | 325 Mesh.....25.0%
200 Mesh.....2.0% | 400 Mesh.....45.0%

Sodium Bicarbonate U.S.P. Granular No. 5 for use in effervescent salts, other pharmaceuticals and special types of cleansers.

TYPICAL SCREEN ANALYSIS
CUMULATIVE PERCENT RETAINED BY

42 Mesh.....Trace | 100 Mesh.....92.5%
65 Mesh.....27.0% | 170 Mesh.....99.0%
80 Mesh.....66.5%

Sodium Bicarbonate U.S.P. Treated Free-Flowing for use in fire extinguishers and sponge rubber.

TYPICAL SCREEN ANALYSIS
CUMULATIVE PERCENT RETAINED BY

42 Mesh.....Trace | 200 Mesh.....85.0%
100 Mesh.....5% | 325 Mesh.....70.0%
170 Mesh.....20.0% | 400 Mesh.....80.0%

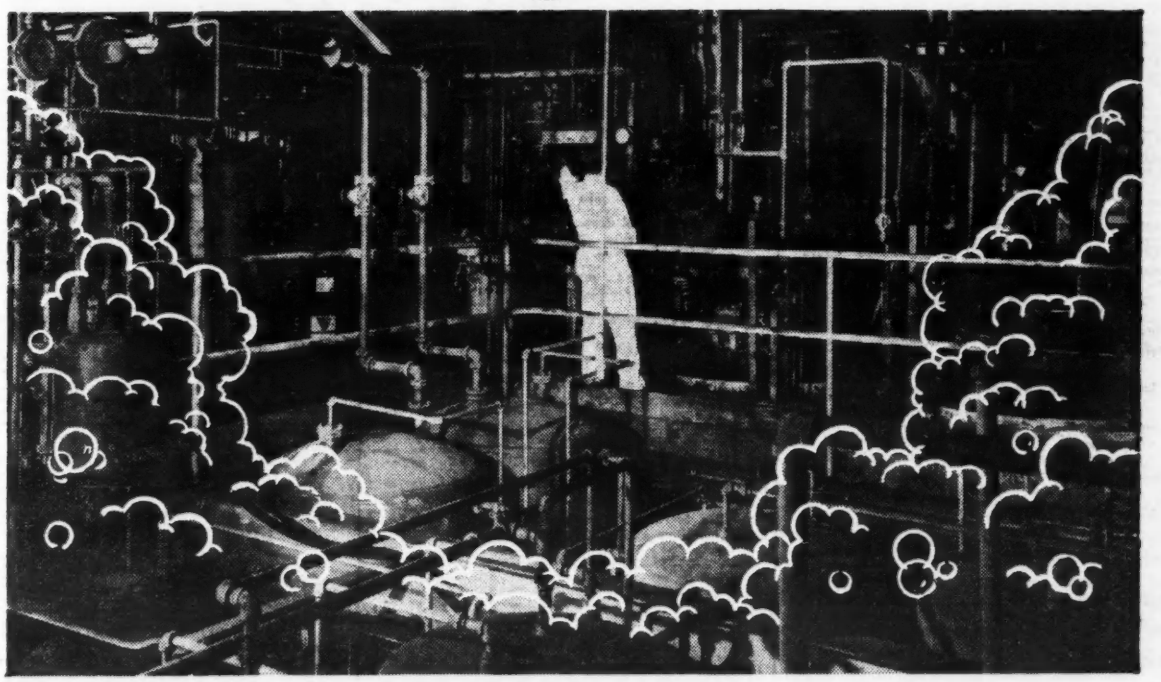
Are you getting sodium bicarbonate of the specific grain size for optimum results in your process or for maximum shelf life and performance of your products? You can eliminate doubts by specifying Church & Dwight. This simple step will assure you of obtaining the widest selection of grain sizes available because Church & Dwight is the country's largest supplier of Sodium Bicarbonate U.S.P. You'll also receive for the asking unmatched technical service based on more than 100 years of experience with sodium bicarbonate. Unusual grain size requirements are given special attention. Try us and see.

CHURCH & DWIGHT CO., INC., 70 PINE STREET, NEW YORK 5, N. Y.

Salt, table vacuum, common, fine, paper bgs., c.l.	100 lbs.	1.34	—
Saltcake, dom., bulk, works, 100% Na_2SO_4 basis	ton.	28.00	—
Saltpeter (see Potassium nitrate).			
Sandalwood, E. Indian, chips, bgs.,	lb.	.55 -	.66
powd., fib. dms	lb.	.75 -	.76
Sandalwood oil, cns	lb.	21.00	—
Sarcosine, tech., tanks, f.o.b., works, frt. equald	lb.	1.03 -	—
	lb.	No stocks.	
Sardine oil, crude, tanks, Pac. coast.			
Sassafras oil, artif., dms	lb.	.45 -	—
Nat., dom., dms	lb.	1.40 -	—
Savory oil, cns	lb.	4.75 -	—
Schaeffer's salt, paste, dms., frt. alld. 100% basis	lb.	.85 -	—
Powd., bgs., frt. alld., 100% basis.	lb.	.95 -	—
Scopolamine hydrobromide, USP, bots.	oz.	13.00 -	—
Sebacic acid, CP. bgs., c.l., works.	lb.	.69½-	—
bgs., l.c.l., works	lb.	.71½-	—
Purified, bgs., c.l., works	lb.	.65½-	—
bgs., l.c.l., works	lb.	.67½-	—
Seidlitz mixture, fib. dms., 5,000-lb. lots	lb.	.30½-	—
fib. dms., smaller lots	lb.	.31 -	.32
Selenium, powd., 99½%, dms., dlvd.	lb.	7.00 -	—
Senega root, bls	lb.	3.00 -	—
Senna leaves, Alexandria, whole and half, bls	lb.	.20 -	.22
siftings	lb.	.16 -	—
Tinnevelly, No. 1, bls	lb.	.22 -	—
No. 2, bls	lb.	.18 -	—
No. 3, bls	lb.	.14 -	—
pods, bls.	lb.	.23 -	—
powd., bbls., bxs	lb.	.17 -	—
Serpentaria root, bls	lb.	6.50 -	—
Sesame oil, USP, dms	lb.	.38 -	.39
Sesame seed, Colombian, bgs	lb.	.15½-	—
Lebanese, hulled, bgs	lb.	.19 -	—
Nicaraguan, hulled, bgs	lb.	.24 -	—
nat., bgs.	lb.	.14 -	—
Salvadorian, Nat., bgs	lb.	.16 -	—
Shellac, bleached bonedry, bgs., 1,500-lb. lots	lb.	.46 -	—
dms., l.c.l., works	lb.	.22 -	.30½
bbls., 1,500-lb. lots	lb.	.47 -	—
kgs., 1,500-lb. lots	lb.	.48 -	—
Bonedry shellacs prices for less than 1,500-lb. lots 1c. per lb. higher for all packages.			
Shellac, bleached, refd., bgs., 1,500-lb. lots	lb.	.56 -	—
bbls., 1,500-lb. lots	lb.	.57 -	—
kgs., 1,500-lb. lots	lb.	.58 -	—
Shellac, orange, lemon No. 1, bgs., 10-bg. lots	lb.	.37 -	.39
lemon No. 2, bgs., 10-bg. lots.	lb.	.34 -	.37
superfine, bgs., 10-bg. lots	lb.	.32 -	.34
Shellac in 1 to 10-bg. lots 1c. per lb. more.			
Shingle stain oil, tar distillate, dms., c.l., works	gal.	.37 -	—
dms., l.c.l., works	gal.	.48 -	—
tanks, works	gal.	.25 -	—
Sienna pigment, burnt, paper bgs., c.l., works	lb.	.06½-	.18½
paper bgs., l.c.l., works	lb.	.06¾-	.17¾
Raw, paper bgs., c.l., works	lb.	.06¾-	.16¾
paper bgs., l.c.l., works	lb.	.07 -	.17
Silica, amorpn., dry-grd., 325 mesh, bgs., c.l., works	ton.	25.00 -	—
bgs., l.c.l., works, ex whse.	ton.	45.00	-55.00
Silica, hard-quartz, 99½%, 325 mesh, bgs., c.l., works	ton.	20.00 -	—
bgs., l.c.l., works	ton.	25.00 -	—
99½%, 140 mesh, bgs., c.l., works	ton.	15.00 -	—
bgs., l.c.l., works	ton.	20.00 -	—
Silicon tetrachloride, tech., dms., c.l., works	lb.	.18 -	—
tanks, works	lb.	.17 -	—
Silver bullion, ingots, cs	Troy oz.	.91⅛-	—
Silver cyanide, bots., 1,000-oz. lots,	oz.	.94¾-	—
bots., 500-oz. lots	oz.	.95¼-	—
bots., 100-oz. lots	oz.	.96¼-	—
Silver nitrate, CP. cryst., bots., 1,000 to 4,000 oz., f.o.b. works	oz.	.67¼-	—
bots., 250-500 oz., same basis.	oz.	67¾-	—
USP granular silver nitrate 4c. per oz. higher.			
Silver proteinate, mild, USP, 16-oz. bots.	oz.	1.46 -	—
Snakeroot oil, Canada, cns	lb.	40.00	-43.00
Soapbark, crushed, bls	lb.	.30 -	.35
Powd., bls.	lb.	.35 -	.40
Whole, bls.	lb.	.20 -	.25
Soda ash, dense, 58%, paper bgs., c.l., works	100 lbs.	1.90 -	—
paper bgs., l.c.l., stock pts.,	100 lbs.	3.00 -	4.77
bulk, c.l., works	100 lbs.	1.60 -	—
Light, 58%, paper bgs., c.l., works	100 lbs.	1.85 -	—
paper bgs., l.c.l., stock pts.	100 lbs.	3.95 -	4.72
bulk, c.l., works	100 lbs.	1.55 -	—
Soda, caustic, flake, 76%, dms., c.l., works, frt. equald	100 lbs.	5.20 -	—
liq., 50%, sellers' tanks, works, dry basis	100 lbs.	2.90 -	—
50%, rayon type, sellers' tanks, works, dry basis	100 lbs.	2.90 -	3.00
Soda, caustic, flake, 73%, sellers' tanks, works, dry basis.	100 lbs.	3.00 -	—
liq., 73%, rayon type, sellers' tanks, works, dry basis	lb.	3.00 -	3.10
solid, 76%, dms., c.l., works,	100 lbs.	4.80 -	—
Soda, sal, conc., bgs., c.l., works.	100 lbs.	2.50 -	—
bgs., smaller lots, works	100 lbs.	2.80 -	—
Sodium acetate, anhyd., bgs., c.l., dlvd. E	lb.	.14½-	—
NF, 60%, gran., dms., c.l., works.	lb.	.15½-	—
dms., l.c.l., works	lb.	.17½-	—
Sodium alginate, NF, white powd., dom., 300 lbs. or more	lb.	1.02 -	—
Sodium p-aminosalicylate, dms., 100-lb. lots or more, frt. adjusted	lb.	1.90 -	—
Sodium antimoniate, bgs., c.l., dlvd. E	lb.	.27½-	—
bgs., l.c.l., dlvd. E	lb.	.29 -	—
Sodium arsenate, 60% arsenic pentoxide, 200 lb. dm., less than ton lots, f.o.b. works	lb.	.24 -	—
ton lots or more, same basis.	lb.	.23½-	—
Sodium arsenite, 90% pink powder, 75% arsenious oxide, leaders, dms., ton lots or more, works	lb.	.17½-	—
dms., less than ton lots, works	lb.	.18 -	.19
Sodium ascorbate, dms., 25-50 kilo dms., f.o.b. works	kilo.	10.00 -	—
10-kilo dm., same basis	kilo.	10.35 -	—
5-kilo dm., same basis	kilo.	10.75 -	—
1-kilo bot., same basis	kilo.	11.00 -	—
Sodium benzoate, tech., dms., c.l., t.l., frt. alld.	lb.	.35 -	—
dms., l.c.l., same basis	lb.	.39 -	—
USP, dms., c.l., t.l., frt. alld.	lb.	.38 -	—
dms., ton lots, same basis	lb.	.43 -	—
dms., 1,000-lb. lots, same basis.	lb.	.45 -	—
Sodium bicarbonate, USP, gran., bgs., c.l., works	100 lbs.	2.95 -	—
bgs., l.c.l., works	100 lbs.	3.85 -	—
USP, powd., bgs., c.l., works,	100 lbs.	2.55 -	—
bgs., l.c.l., works	100 lbs.	3.45 -	—
Sodium bichromate, gran., bgs., c.l., t.l., works	lb.	.13 -	—
bgs., l.c.l., works	lb.	.13½-	.14¾
Sodium bichromate in dms. ⅝c. per lb. higher.			
Sodium bifluoride, bbls., c.l., works, frt. equald	lb.	.19½-	—
bbls., l.c.l., same basis	lb.	.2025-	—
Sodium bisulfate, bulk, c.l., works.	100 lbs.	2.00 -	—
dms., c.l., frt. equald	100 lbs.	3.00 -	3.60
dms., l.c.l., frt. equald	100 lbs.	3.50 -	4.10
Sodium bisulfite, anhyd., bgs., c.l., works	100 lbs.	5.00 -	—
bgs., l.c.l., works	100 lbs.	5.45 -	—
Soln., 35°, bbls., c.l., works	100 lbs.	1.70 -	—
bbls., l.c.l., works	100 lbs.	2.20 -	—
Sodium borate (see Borax).			
Sodium borohydride, powd., dms., c.l., works	lb.	19.90 -	—
dms., l.c.l., works	lb.	33.00	-40.00
Sodium borohydride, stabilized water soln., 12% NaBH, 100% basis, dms., works	lb.	15.00 -	—
Pelletized sodium borohydride $1 per lb. higher in 1,000-lb. lots.			
Sodium bromide, USP, gran., dms., works	lb.	.40 -	—
Sodium carbonate, cryst., monohydrated (see Soda, sal).			
Sodium carbonate, monohydrated, bgs., c.l., works	100 lbs.	3.10 -	—
bgs., l.c.l., works	100 lbs.	3.50 -	—
Sodium carboxymethyl cellulose (see CMC).			
Sodium chlorate, cryst., 350-lb. dms., c.l., works	lb.	.09 -	—
dms., l.c.l., works	lb.	.09½-	.10½
Sodium chlorate in 100-lb. dms., only, ¼c. per lb. higher.			
Sodium chloride, tech. (see Salt).			
Sodium chloride, USP, gran., bgs.	lb.	.05 -	—
Sodium chlorite, tech., dms., c.l., works	lb.	.58 -	—
dms., 20-dm. lots or more, works.	lb.	.66 -	—
dms., smaller lots, works	lb.	.70 -	.73
Sodium chloroacetate, tech., dms., c.l., works	lb.	.27 -	—
dms., l.c.l., works	lb.	.28 -	—
Sodium chromate, anhyd., fib. dms., c.l., t.l., works	lb.	.14¾-	—
fib. dms., l.c.l., works	lb.	.15¼-	.16½
Sodium chromate tetrahydrate, bgs., c.l., t.l., works	lb.	.1015-	—
bgs., l.c.l.	lb.	.1065-	.1190
Sodium citrate, anhyd., 200-lb. dm., f.o.b. works E.	lb.	.62 -	—
NF VIII, gran, bgs., c.l., same basis	lb.	.36 -	—
USP XIV, gran., bgs., c.l., same basis	lb.	.29 -	—
Sodium citrate, USP, powd. prices ½c. higher.			
Sodium cyanate, dms., 1,000-lb. lots, works	lb.	.83 -	—
dms., smaller lots, works	lb.	.90 -	1.10
Sodium cyanide, briquettes or gran., 97 percent min., dms., works, 20,000-lb. lots	lb.	.176 -	—
dms., same basis, 5,000 to 19,999-lb. lots	lb.	.188 -	—
dms., same basis, 1,000 to 4,900-lb. lots	lb.	.198 -	—
Sodium cyclamate, 100-lb. dm., f.o.b. works	lb.	1.93 -	—
Sodium diacetate, anhyd., 39-41% acetic acid, dms., c.l., works	lb.	.18 -	—
250-lb. dms., l.c.l., works	lb.	.18¾-	—
Tech., 33-35% acetic acid, dms., l.c.l., works	lb.	.15 -	—
250-lb. dms., l.c.l., works	lb.	.15¾-	—
Sodium dimethyl dithiocarbamate, 40% soln., dms., c.l., t.l., frt. alld., 100% basis	lb.	.42 -	—
dms., l.c.l., t.l., same basis	lb.	.47 -	.53
tanks, same basis	lb.	.38 -	—
Sodium ferrocyanide, bgs., 10-ton lots	lb.	.13½-	—
bgs., smaller lots	lb.	.14¼-	—
Sodium fluoride, white, 97%, fib. dms., c.l., works, frt. equald	lb.	.1390-	—
fib. dms., l.c.l., works, frt. equald	lb.	.1465-	—
Sodium formate, bgs., c.l., works.	100 lbs.	7.65 -	—
bgs., l.c.l., ex whse	100 lbs.	8.05 -	—
Sodium gentisate, 100-lb. fib. dms.	lb.	5.50 -	—
Sodium gluconate, refd., 250-lb. dm., f.o.b. works E.	lb.	.84 -	—
Tech., bgs., c.l., t.l., same basis	lb.	.34 -	—

SILICONE NEWS from Dow Corning

Foam Eating Into Profits?



Job-proved Dow Corning Defoamers Speed Processing, Raise Capacity

Ever try to blow up a balloon with a hole in it? Hard to get it up to any size, isn't it. The same's true of foamers . . . with Dow Corning Silicones added. Silicones put holes in bubbles . . . keep systems foam-free! They're perfect foam controllers: reliable, economical, safe, easy to use . . . quickly available from Dow Corning warehouses conveniently located to expedite shipment to you.

No Hold-Ups. No Foam-Overs. Production slow-downs caused by foam are eliminated when fast-working Dow Corning Silicones are added to systems. The absence of foam permits you to make more efficient use of equipment, step up production and meet schedules never before thought possible. Capacity is increased, and foam-overs are prevented . . . thereby cutting cost of clean-up and maintenance and helping reduce fire hazards.

Eliminate foam-overs here.

What's Your Foamer? Today, Dow Corning Silicones are used both as antifoamers and as defoamers in processing chemicals, petroleum products, asphalt, textiles, paper, paints, adhesives . . . in metalworking and laboratory work . . . in virtually every industry and process — even in food processing where the use of Dow Corning Silicones at designated levels is sanctioned by FDA.

If you're troubled with foam slowing down your plant operation, taking up productive capacity, or creating maintenance, it'll pay you to test Dow Corning Silicones.

New Literature and Free Sample. A new 8-page manual, "The ABC's of Defoaming", will help you learn all the facts about Dow Corning silicone defoamers . . . how and where to use them, examples of the small quantities of silicones needed to control foam, and typical successful applications. Write today for your FREE copy and ask for a generous FREE SAMPLE of the silicone defoamer that you can test . . . that will likely give you the most efficient, most economical defoaming action. Indicate your type of foamer: aqueous, oil, food or other. Address Dept. 6308.

Investigate other time-saving silicones... the nearest Dow Corning office is your No. 1 source for complete information and technical service.

first in silicones

Dow Corning CORPORATION
MIDLAND, MICHIGAN

ATLANTA BOSTON CHICAGO CLEVELAND DALLAS LOS ANGELES NEW YORK WASHINGTON, D. C.

Sodium hydride, 50% soln. in oil, dms., works..lb. 1.25 - 2.50
25% soln. in oil, dms., 50 lbs. or less, f.o.b. shipping point, lb. 2.20 - —
dms., 50-99 lbs., same basis lb. 1.77 - —
dms., 100-999 lbs., same basis lb. 1.20 - —
dms., 1,000 lbs. or more, same basis lb. .95 - —

Sodium hydrosulfide (see Sodium sulfhydrate).

Sodium hydrosulfite, dms, c.l., frt. alld lb. 23½- —
dms., l.c.l., frt. alld. ..... lb. 25¾- —

Sodium hydroxide, NF, pellets, 100-lb. dms., 1 to 100-dm. lots, lb .23½- .28

Sodium hydroxide, tech. (see Soda, caustic).

Sodium hypophosphite, NF, dms., 1,000-lb. lots..lb. .99 - —

Sodium hyposulfite (see Sodium thiosulfate).

Sodium iodide, USP, 300-lb. dms., f.o.b. works lb. 1.98 - —

Sodium lauryl sulfate, dms., c.l., dlvd lb. .20½- —
dms., l.t.l., dlvd. ..... lb. .21½- —
tanks, dlvd. ..... lb. .19½- —

Sodium lignin sulfonate, bgs., c.l., works ..100 lbs. 4.25 - 6.50
l.c.l., bgs., works..... 100 lbs. 4.40 - 7.00

Sodium metabisulfite (see Sodium bisulfite).

Sodium metaborate octahydrate, gran., bgs., c.l., works ton.210.00 - —
bgs., ton lots, ex whse ..100 lbs. 8.00 - —
bgs., smaller lots, ex whse. 100 lbs. 9.25 -11.25

Tetrahydrate, bgs., c.l., works. ton.210.00 - —
bgs., ton lots, ex whse 100 lbs.13.93 - —
bgs., smaller lots, ex whse. 100 lbs.15.18 -17.18

Sodium, metallic, bricks, c.l., works, lb. .21 - —
Fused, 18,000-lb. lots or more, works ..lb. .19½- —
tanks, works ..... lb. .17 - —

Sodium metalinate, bbls., frt. alld, lb. .62 - —

Sodium metaphosphate, bgs., c.l., f.o.b. shipping pt ..100 lbs.11.10 - —
bgs., l.c.l., same basis ..100 lbs.11.85 - —
dms., c.l., same basis ....100 lbs.11.70 - —
dms., l.c.l., same basis ....100 lbs.12.45 - —

Sodium metasilicate, anhyd., bgs., c.l., works ..100 lbs. 5.70 - —
bgs., 6,000-19,900 lb. lots, works. 100 lbs. 6.05 - —
dms., c.l., works ..... 100 lbs. 6.20 - —
dms., l.c.l., works..... 100 lbs. 6.55 - —

Sodium metasilicate pentahydrate, bgs., c.l., works ..100 lbs. 4.45 - —
bgs., l.c.l., works..... 100 lbs. 4.80 - 6.75
dms., l.c.l., works..... 100 lbs. 4.95 - —
dms., l.c.l., works..... 100 lbs. 5.30 - 7.25

Sodium molybdate, anhyd., dms., works, frt. equald lb. .92 - .99
Cryst., dms., works, frt. alld lb. .74 - .76

Sodium monoglutamate (see Monosodium glutamate).

Sodium monohydrate (see Sodium carbonate, monohydrated).

Sodium naphthionate, bbls. ..... lb. .72 - —

Sodium nitrate, dom., crude, bgs., c.l., works ton.48.00 - —
bulk, c.l., works ..... ton.44.00 - —
Imp., crude, 100-lb. bgs., c.l., Atl., Gulf, Pac., whse ton.48.00 - —
bulk, c.l., same basis ....ton.44.00 - —

Sodium nitrite, USP, bbls., c.l., works, frt. equald ..100 lbs 9.00 - —
bbls., l.c.l., same basis ..100 lbs.11.00 - —

Sodium orthosilicate, conc., dms., c.l., works ..100 lbs. 6.70 - —
dms., l.c.l., works..... 100 lbs. 7.05 - 7.65
Hydrated, flake, bbls., c.l., works. 100 lbs. 5.65 - —
bbls., l.c.l., works .... 100 lbs. 7.60 - 7.90

Sodium oxalate, 88%, bgs., works. 100 lbs.12.35 - —
99%, bgs., works ..100 lbs.15.40 - —

Sodium para-aminobenzoate (see Sodium p-aminobenzoate).

Sodium para-aminosalicylate (see Sodium p-aminosalicylate).

Sodium pentachlorophenate, briquets, dms., c.l., works, frt. equald lb. .26 - —
dms., l.c.l., same basis .... lb. .27½- .34
Pellets, dms., c.l., same basis lb. .26 - —
dms., c.l., same basis ..... lb. .27½- .34
Powd., dms., c.l., same basis.... lb. .25 - —
dms., l.c.l., same basis ..... lb. .26½- .33

Sodium pentabarbital, USP, dms., 100 lbs. or more ..lb. 6.00 - —

Sodium perborate, NF, tech., bgs., c.l., works lb. .18½- —
bgs., l.c.l., works ..... lb. .19 - .21

Sodium peroxide, dms., c.l., t.l., dlvd. E. of Miss lb. .21½- —
dms., l.c.l., same basis..... lb. .22 - .22½

Sodium phenobarbital, USP, 100-lb. dms ..lb. 3.75 - —

Sodium phenosulfonate, USP, IX, gran., dms ..lb. .52 - .53
NF, powd., dms. ..... lb. .55 - .56

Sodium phosphate, dibasic, anhyd., bgs., c.l., frt. equald 100 lbs. 7.95 - —
bgs., l.c.l., same basis ..100 lbs. 8.35 - 9.40

Dibasic, cryst., bgs., c.l., t.l., frt. equald ..100 lbs. 4.60 - —
bgs., l.c.l., frt. equald ..100 lbs. 5.00 - 5.75

Dibasic, duohydrate, bgs., c.l., frt. equald ..100 lbs. 7.60 - —
bgs., l.c.l., same basis ..100 lbs. 8.10 - —

USP, dried, powd., bgs., dms., works lb. .19 - .20½

Monobasic, anhyd., bgs., c.l., frt. equald ..100 lbs. 9.00 - —
bgs., l.c.l., same basis ..100 lbs. 9.40 -10.00

Tribasic, anhyd., bgs., c.l., frt. equald ..100 lbs. 9.00 - —
bgs., l.c.l., frt. equald ..100 lbs. 9.45 -10.05

Sodium phosphate in dms. 60c. to 80c. higher than bgs.

Sodium picramate, tech., paste, dms., f.o.b. works, frt. equald lb. .90 - —

Sodium propionate, any quantity, dms., dlvd. E. of Rockies, lb. .34½- —

Prices W. of Rockies 3c. per lb. more.

Sodium prussiate, yellow (see Sodium ferrocyanide).

Sodium pyrophosphate acid, bgs., c.l., works, frt. equald. 100 lbs.11.10 - —
bgs., l.c.l., same basis 100 lbs.11.85 12.35

Sodium pyrophosphate, ferric, dms., c.l., t.l., works ..lb. .36 - —
dms., l.c.l., works..... lb. .37 - .39

Tetrabasic, anhyd., bgs., c.l., works, frt. equald ..100 lbs. 7.81 - —
bgs., l.c.l. same basis ..100 lbs. 9.21 - 9.71

Sodium salicylate, USP, dms., 1,000-lbs. or more..lb. .78½- —
dms., less than 1,000 lbs., dms.lb. .81½- —

Sodium sesquicarbonate, bgs., c.l., works..100 lbs. 2.35 - —

Sodium sesquicarbonate, bgs., l.c.l., dlvd. zone 1..100 lbs. 4.10 - 4.35
dlvd. zone 2.....100 lbs. 4.35 - 4.60
dlvd. zone 3 .....100 lbs. 4.75 - 4.90
dlvd. zone 4 .....100 lbs. 5.35 - 5.60

Sales zones are (1) Atl. states E. of Miss., R and N of south bound of Ky. and Va., Ala., La., and Miss., south of 31°; Tex. E. of 100°; S. of 31° Fla.; also Me., N. H. and Vt. in which there are special county zones; Davenport, Ia., and St. Louis; (2) Ark. E. of 98° Ga.; Iowa (except Davenport) Minn., Mo. (except St. Louis) Neb. E. of 98° N. C., S. C., Tenn. and Tex. N. of 31° and E. of 100° (except Wichita Falls); also Ala., La. and Miss. No. of 31°; (3) Ark. W. of 98°, Kan., Neb. W. of 98° N. D., Okla., S. D., Tex., W. of 100° (including Wichita Falls, excluding El Paso); (4) Ariz., Colo., Idaho, Mont., Nev., N. M., Utah, Wyo. and El Paso, Tex.

Sodium sesquisilicate, anhyd., bgs., c.l., t.l., works..100 lbs. 5.70 - —
dms., c.l., t.l., works....100 lbs. 6.20 - —

Sodium sesquisilicate, hydrated, bgs., c.l., works..100 lbs. 5.00 - —
bgs., 6,000-19,900 lb. lots, works..100 lbs. 5.35 - —
dms., c.l., works..100 lbs. 5.50 - —
dms., 6,000-19,900 lb. lots, works. 100 lbs. 5.85 - —

Sodium silicate, liq., 40° Be., 1:3.2, turbid, dms., c.l., works. 100 lbs. 1.65 - —
dms., l.c.l., works..100 lbs. 1.90 - 2.40
tanks, works .....100 lbs. 1.20 - —
47° Be., 1:29.9, turbid, dms., c.l., works ..100 lbs. 2.25 - —
dms., l.c.l., works..100 lbs. 2.60 - 3.45
tanks, works .....100 lbs. 1.90 - —
52° Be, 1:2.4, turbid, dms., c.l., works..100 lbs. 2.65 - —
dms., l.c.l., works....100 lbs. 3.00 - 3.50
tanks, works .....100 lbs. 2.30 - —
Solid, 1.3.2, bgs., works.....ton.67.50 - —

Sodium silicofluoride, bgs., c.l., works..lb. .065 - —
bgs., l.c.l., works.....lb. .725- —

Sodium silicofluoride in dms., 0.4c. per lb. higher.

Sodium stannate, dms., works, frt. alld. E..lb. .642 - .702

Sodium sulfa drugs (see Sulfa name).

Sodium sulfanilate, bbls., works..lb. .22 - —

Sodium sulfate, NF VII, dried, powd., dms..lb. .22½- —
Tech., anhyd., bgs., c.l., dlvd. E. ton.54.00 - —
Tech., detergent, rayon grade, bgs., c.l., works..ton.36.00 - —
bulk, c.l., works....ton.32.00 - —
USP, cryst., fib. dms. .....lb. .17½- .18

Sodium sulfhydrate, flake, 70-72%, dms., c.l., works, frt. equald..lb. .07¼- —
dms., l.c.l., same basis..lb. .08¼- —
Liq., 40-44%, tanks, works, 100% basis..ton.130.00 - —

Sodium sulfide, flake, dms., c.l., works, E., frt. equald..lb. .06 - —
dms., l.c.l., same basis .....lb. .07 - —
Fused, bbls., c.l., works, E., frt. equald..lb. .05½- —
bbls., l.c.l., same basis ..... lb. .06½- —

Sodium sulfite, anhyd., powd., bgs., c.l., works..100 lbs. 7.55 - —
bgs., l.c.l., same basis..100 lbs. 7.95 - —
Anhyd., tech., bgs., c.l., works. 100 lbs. 3.50 - —
bgs., t.l., same basis..100 lbs. 4.00 - —

Sodium sulfocyanide, CP (see Sodium thiocyanate).

Sodium tetraborate (see Borax).

Sodium tetrasulfide, liq., 40%, dms., c.l., works, frt. equald..lb. .04½- —
dms., l.c.l., same basis.....lb. .05½- —

Sodium thiocyanate, CP, dms. ....lb. .55 - .65
Tech., anhyd., dms., 1 ton lots or more, works..lb. .317 - —
dms., less than ton lots, works..lb. .337 - —

Sodium thiosulfate, NF, cryst., bbls. lb. .13½- —
Tech., anhyd., 100-lb. bgs., c.l., t.l., frt. equald..100 lbs. 7.75 - —
100-lb. bgs., l.c.l., t.l., frt. equald..100 lbs. 8.15 - —

Sodium thiosulfate, tech., anhyd., photo grade, 64-lb. bgs., c.l., t.l., frt. equald..lb. .0775- —
64-lb. bgs., l.c.l., t.l., frt. equald..lb. .0815- —

Tech., pentahydrate, photo grade, 100-lb. bgs., c.l., t.l., frt. equald..100 lbs. 4.95 - —

Sodium thiosulfate, tech., pentahydrate, photo grade, 100-lb. bgs., l.c.l., t.l., frt. equald..100 lbs. 5.20 - —

Sodium titanate, ctns., c.l., works. lb. .14¼- —
ctns., 5-ton lots, works..... lb. .14½- —
ctns., 1-ton lots or less, works..lb. .14¾- —

Sodium trichloroacetate, 90%, 100-lb. dms., c.l., frt. alld. E. lb. .35 - —
50-lb. dms., c.l., frt. alld. E..lb. .35½- —
10-lb. cns., c.l., frt. alld. E....lb. .42 - —

Prices on Sodium trichloroacetate W. of the Rockies are 1¾c. per pound higher.

Sodium tripolyphosphate, bgs., c.l., works, frt. equald..100 lbs. 8.16 - —
bgs., l.c.l., same basis....100 lbs. 8.56 - 9.06

Sodium trisilicate, powd., 1:3.2, bgs., c.l., works..100 lbs. 8.95 - —
bgs., l.c.l., works.....100 lbs. 9.70 -13.13
dms., c.l., works.....100 lbs. 9.45 - —
dms., l.c.l., works.....100 lbs.10.20 -10.60

Sodium tungstate, tech., kgs., dlvd. E..lb. 1.32 - —

Sodium-ammonium phosphate, purif., cryst., dms., works..lb. .52 - —

Sodium-carboxymethyl cellulose (see CMC).

Sodium-cinchophen (see Cinchophen-sodium).

Sodium - formaldehyde sulfoxylate, dms., c.l., dlvd..lb. .21 - —
dms., l.c.l., same basis .....lb. .21½- —

Sodium-zirconyl sulfate, fib. dms., 1,000-lb. lots or more works..lb. .28 - —
fib. dms., smaller lots, same basis..lb. .30 - —

Solvent naphtha, coaltar, high-flash, tanks, frt. equald..gal. .30 - .35½

Solvent naphtha, petroleum, straight aromatic, 310°-360°F. b.r., 14°-16°C. m.a.p., tankcars, New Jersey and New York..gal. .29 - —
Houston, Texas .....gal. .29 - —
355°-420°F. b.r., 17°-18°C. m.a.p., tankcars, New Jersey and New York, gal. .30 - —
Houston, Texas .....gal. .30 - —

Solvent naphtha, petroleum, partial aromatic, 211°-265°F. b.r., 31°C. m.a.p., tankcars, New Jersey and New York..gal. .235 - —
286°-340°F. b.r., 22°C. m.a.p., tankcars, New Jersey and New York..gal. .275 - —
319°-380°F. b.r., 27°C. m.a.p., tankcars, New Jersey and New York..gal. .27 - —
322°-395°F. b.r., 28°C. m.a.p., tankcars, New Jersey and New York..gal. .28 - —

Sorbital, powd., dms., c.l., works lb. .36 - —
dms., 1 to 5-ton lots, works. lb. .38 - .39

Sorbital, soln., coml., equeous, dms., c.l., works..lb. .24¼- —
dms., ton lots, works .....lb. .25 - —
dms., smaller lots, works lb. .25¼- —
tanks, works .....lb. .23¼- —

Sorbitan monostearate, fib. dms., 20,000-lb. lots, works..lb. .33 - —

Sorbitan monostearate, fib. dms., 10,000 to 20,000-lb. lots, works..lb. .35 - —
fib. dms., smaller lots, works..lb. .38 - .40

Sorbitan tristearate, fib. dms., 20,000-lb. lots, works..lb. .34 - —
fib. dms., 10,000 to 20,000-lb. lots, works..lb. .36 - —
fib. dms., smaller lots, works..lb. .39 - .41

Sorbitol, NF, reg., 70% aqueous, dms., c.l., works..lb. .18 - —
dms., l.c.l., works.....lb. .19 - —
tanks, works .....lb. .16¼- —
cryst., resin grade, pellets, dms., c.l., works..lb. .23 - —
dms., 1 to 5-ton lots, works. lb. .25 - .26

Soya protein, chemically isolated, old process, bgs., c.l., works. lb. .23 - —
bgs., l.c.l., works.....lb. .23¼- .23½
Chemically isolated, new process, bgs., c.l., works..lb. .20 - —
bgs., l.c.l., works.....lb. .20¼- .29½

Soybean meal, 44%, bulk, unrestricted, Decatur..ton.49.00 - —

Soybean oil, crude, tanks, Decatur. lb. .09¾- —

Foots, soapstock, acid 95%, tanks, N. Y..lb. .05¼- —
Refd., alkali, dms. .....lb. .1405- .1430
tanks .....lb. .1205- —
Clarified, dms. .....lb. .1355- .1380
tanks .....lb. .1155- —
Salad, dms. .....lb. .1375- .1400
tanks .....lb. .1175- —

Soybean oil acids, dbl. dist., dms., lb. .17 - .19½
tanks .....lb. .14½- —
S. D., dms. .....lb. .15¾- .18¼
tanks .....lb. .13¼- —

Sparteine sulfate, cns., 100 oz. or more..oz. .80 - —

Spearmint leaves, dom., bls ....lb. .75 - —

Spearmint oil, NF, dms. .....lb. 8.00 - 9.50

Sperm oil, bleached, winter, 45°, dms..lb. .1575- .1675
tanks .....lb. .1375- —
Nat., winter, 45°, dms.....lb. .1475- .1575
tanks .....lb. .1275- —

Spermaceti wax, blocks, cs.....lb. .31 - .33
Cakes, cs. .....lb. .32 - .34

Spruce oil, cns., dms. .....lb. 2.10 - 3.55

Squill, white, bls. .....lb. .16 - .18
Powd., bbls., bxs.....lb. .17 - .20

St. John's bread, edible, bls. ....lb. .17 - —

Stannic chloride, anhyd., dms., works..lb. .812 - .834

Stannic oxide, dms., dlvd. .....lb. 1.10 - 1.11

Stannous chloride, anhyd dms., works..lb. 1.007 - 1.262
Hydrous, cryst., dms., works..lb. .87 - .88

Stannous sulfate, dms., works..lb. 1.062 - 1.102

Star root (see Helonias root).

Stargrass root (see Aletris root.)

Stavesacre seed, bgs. .....lb. .60 - .61

Stearic acid, dbl., pressed bgs..lb. .15¾- .18¼
Single-pressed, bgs., ...lb. .15¼- .17¾
Triple-pressed, bgs. .....lb. .17½- .20

Stearine, oleo (see Oleostearine.)

Stoddard solvent, petroleum, tanks, east coast, New Jersey, New York..gal. .18 - —
tanks, Houston .....gal. .1475- —
tanks, group 3 .....gal. .12875- —

Stramonium leaves, bgs. .....lb. .13 - —

Streptomycin sulfate, bulk, gram. .035 - .036

Strontium bromide, NF, cryst., 100-lb. dm., f.o.b. E lb. .92 - —

Strontium carbonate, pure, dms., 5-ton lots or more, works.lb. .35 - —
dms., 1-ton lots, works.....lb. .37 - —
Tech., dms., works .....lb. .19 - —

Strontium chromate, fib. dms., dlvd. lb. .48 - —

Strontium iodide, jars, 25-lb. lots lb. 3.57 - —

Strontium nitrate, bgs., c.l., works. 100 lbs.11.00 - —
bgs., l.c.l., works .....100 lbs.12.00 - —

Strontium salicylate, NF, dms ..lb. 1.88 - —

Strontium sulfate, air floated, 90%, 325 mesh, bgs., works. ton.56.70 -66.15

Strophanthin G (see Quabain, USP).

Strophanthin K, bots. .....oz.25.00 -25.50

Strophanthus seed, Kombi, biologically tested, bgs ..lb. 3.50 - 3.75

Styrax gum, USP, cs. .....lb. 4.50 - 5.50

Styrene monomer, polymer grade, 99.6%, dms., c.l., frt. alld. lb. .17 - —
dms., l.c.l., same basis.....lb. .19 - —
tanks, same basis .....lb. .14½- —

Styrene monomer, tech., 99.2%, dms., c.l..lb. .1501- —
dms., l.c.l., same basis.....lb. .1701- —
tanks, bulk, same basis.....lb. .1251- —

Above prices are escalated for each calendar quarter on the basis of cost of crude oil at the well, cost of petroleum refining labor, and prices in the three major sections of the Wholesale Commodity Price Index.

Styrolyl acetate, bots. .....lb. 1.10 - —

Succinic acid, purif., cryst., dms., t.l., frt. alld..lb. .62 - —
dms., l.t.l., same basis.....lb. .63 - .75

Succinic anhydride, dms., c.l., t.l., dlvd..lb. .51 - —
dms., l.c.l., same basis.....lb. .52 - —

Sucrose, refd., white, bgs., refy E. lb. .0970- —

Sucrose acetate, isobutyrate, 90%, dms., t.l., dlvd..lb. .33½- —
dms., l.t.l., same basis.....lb. .35 - —
tanks, same basis .....lb. .31 - —
100%, t.l., dms., dlvd. .....lb. .35½- —
l.t.l., dms., same basis .....lb. .37 - —

Sucrose octa-acetate, denaturing grade, 100-200-lb. lots, bgs., l.c.l., works..lb. 1.00 - —

Sugar (see Sucrose).

Sugar cane, wax, dom., refd., slabs, 50-lb. ctns., works..lb. .60 - .65
80-lb. ctns., spot.....lb. .65 - .75

Sulfabenzamide, dms. .....kilo. 8.80 - 9.90

Sulfabenzamide-sodium, dms. ....kilo. 9.00 -10.10

Sulfacetamide, USP, fib. dms..kilo. 6.61 - 6.83

Sulfacetamide-sodium, USP, fib. dms..kilo. 8.15 - 9.25

Sulfadiazine, USP, microcrystals, dms..kilo.23.35 -24.45
USP, powd., dms. .....kilo.22.60 -23.70

Sulfadiazine-sodium, USP, dms..kilo.24.80 -25.90

Sulfaguanidine, NF X, dms ...kilo. 5.50 - 6.60

Sulfamerazine-sodium, USP, powd., dms..kilo.24.80 25.90

Sulfamethazine, USP XV, microcrystals, dms..kilo.19.65 -20.75
USP XV, powd., dms. .....kilo.18.75 -19.85

Sulfamic acid, cryst., dms., c.l., t.l., works..100 lbs.16.00 - —
dms., l.c.l., l.t.l., works..100 lbs.17.50 18.50
Gran., dms., c.l., t.l., works. 100 lbs.14.75 - —
dms., l.c.l., l.t.l., works..100 lbs.16.25 -17.25

Sulfanilamide, NF, reg., 1,000 lb., frt. equald..lb. 1.50 - —
NF, fib. dm., frt. equald.....lb. 1.55 - —

Sulfanilamide quinoxaline, veterinary, dms..kilo.16.28 - —

Sulfanilic acid, tech., dms., c.l., frt. alld..lb. .21 - —
dms., l.c.l., frt. alld.....lb. .23 - —

Sulfapyridine, USP XV, powd., bots., tins..kilo.15.45 -16.55

Sulfapyridine-sodium, monohydrate, dms..kilo.16.55 -17.65

Sulfathiazole, NF X, microcrystals, dms..kilo. 6.25 - 6.90
NF X, powd., dms. .....kilo. 5.50 - 6.15

Sulfathiazole-sodium, NF X, dms., 1,000-lb. lots or more..lb. 2.35 - —

Sulfur, coml., flour, bgs., mines. 100 lbs. 2.35 - —
bbls., mines .....100 lbs. 3.30 - —
lump, bgs., mines .....100 lbs. 2.25 - —
bbls., mines .....100 lbs. 2.80 - —

Sulfur, crude, dom., bright, bulk, f.o.b. cars, mines long-ton.23.50 - —
export, f.o.b. vessels, Gulf ports. long-ton.25.00 - —
US and Canada, f.o.b. vessels Gulf ports..long-ton.25.00 - —

Domestic dark sulfur prices are $1 per long-ton lower.

Sulfur, crude, imp., Mexican, bulk, filtered, f.o.b., vessel, Coatzacoalcos..long-ton.24.00 - —

Mexican dark sulfur price is $1 per long-ton lower.

Sulfur, refd., flowers, NF, bgs., mines..100 lbs. 5.65 - —
bbls., mines .....100 lbs. 7.00 - —
flour, light, bgs., mines.100 lbs. 5.25 - —
bbls., mines .....100 lbs. 6.25 - —
lump, bgs., mines .....100 lbs. 4.95 - —
rolls, bgs., mines .....100 lbs. 5.50 - —
bbls., mines .....100 lbs. 6.25 - —
salt block, bgs., mines..100 lbs. 4.65 - —
virgin block, bbls., mines 100 lbs. 4.70 - —

Sulfur, rubbermakers, coml., reg., bgs., mines..100 lbs. 2.45 - —
bbls., mines .....100 lbs. 3.70 - —
98-100%, passing through 325 mesh, bgs., mines..100 lbs. 2.55 - —
bbls., mines .....100 lbs. 3.80 - —
refd., bgs., mines .....100 lbs. 4.90 - —
bbls., mines .....100 lbs. 6.05 - —
treated, 2.5% mineral oil, bgs., mines..100 lbs. 2.75 - —
bbls., mines .....100 lbs. 4.00 - —

Sulfur dichloride, ret. dms., c.l., works, frt. equald..lb. .05¼- —
ret. dms., l.c.l., same basis....lb. .06¼- —
tanks, same basis .....lb. .04½- —

Sulfur dioxide, liq., coml., cyls., works, frt. equald..lb. .10 - .12
multi-unit cars, works....lb. .0535- —
tanks, works .....lb. .045 - —

Sulfur dioxide, refrigeration, cyls., dlvd..lb. .33 - —

Sulfur monochloride, 55-gal. non-ret. dms., c.l., frt. equald..lb. .05¼- —
dms., l.c.l., same basis .....lb. .06¼- —
tanks, same basis .....lb. .04½- —

Sulfuric acid, 60° Be, cbys., c.l., works..100 lbs. 2.00 - —
cbys., l.c.l., works .....100 lbs. 2.30 - —
tanks, works .....ton.18.60 - —
66° Be, cbys., c.l., works..100 lbs. 2.25 - —
cbys., l.c.l., works .....100 lbs. 2.55 - 3.35
tanks, works .....ton.22.35 - —
98%, tanks, works .....ton.23.50 - —
99%, tanks, works .....ton.23.70 - —
100%, tanks, works .....ton.23.95 - —
CP, NF, consumers' cbys., c.l., frt. equald lb. .12¾- —

Sulfuric acid, CP, NF, consumers', cbys., l.c.l., same basis. lb. .14¼- .14¾
5-pt. bots., extra, cs., c.l., works, frt. alld lb. .16¼- —
5-pt. bots., extra, cs., l.c.l., same basis lb. .17¾- .18¾

Sulfuric acid, fuming (oleum), 20%, tanks, works ..ton.25.00 - —
40%, tanks, works .....ton.29.00 - —
65%, tanks works .....ton.39.50 - —

Superphosphate, run-of-pile under 22% a.p.a., pulv., bulk, c.l., Baltimore unit-ton. .90 - .93
bulk, c.l., Carteret, N. J. unit-ton. .90 - .93
bulk, f.o.b. vessel at Fla. unit-ton. 1.03 - —

Superphosphate, triple, 48% or more a.p.a., pulv., bulk, c.l., East Tampa, Fla., unit-ton. 1.00 - —

Sweet birch oil, USP, northern, cns..lb. 4.00 - 9.50
USP, southern, cns .....lb. 2.00 - 3.05

T

2,4,5-T, dms., c.l., works, frt. equald. lb. 1.18 - —
dms., l.c.l., same basis .....lb. 1.25 - —
2,4,5-T, isopropyl ester, dms., c.l., works, frt. equald..lb. 1.24 - —
dms., l.c.l., works.....lb. 1.29 - —

Talc, dom., fibrous, grd., bgs., c.l., works, New York..ton.28.00 - —
bgs., l.c.l., works.....ton.31.00 -36.00
fibrous, 99.5%, 325 mesh, bgs., c.l., works, New York..ton.31.00 - —
bgs., l.c.l., works .....ton.34.00 - —

Talc, dom., fibrous, 99.95%, 400 mesh, micronized, bgs., c.l works..ton.38.00 - —
625 mesh, micronized, bgs., c.l., works..ton.80.00 - —
ord., Calif., grd., bgs., c.l., works..ton.34.00 -39.50
Vermont, off-color, grd., bgs., c.l., works..ton.19.40 - —
bgs., l.c.l., works.....ton.37.00 - —
Imp., Canadian, grd., bgs., c.l., mines..ton.20.00 -35.00

Tall oil, crude, dms., c.l., works..lb. .04¼- .04¼
tanks, works .....lb. .02¾- .03
Dist., depending on grade, dms., c.l., works..lb. .06½- .07¼
dms., l.c.l., works .....lb. .07 - .08
tanks, works .....lb. .04½- .05¼
Tall oil, refd., depending upon grade, dms., c.l., works lb. .07¼- .09
dms., l.c.l., works.....lb. .07½- .09¼
tanks, works .....lb. .05¼- .06¾
Tall oil acids, dms., c.l., works....lb. .07 - .08
dms., l.c.l. .....lb. .07¼- .08¼
tanks, works .....lb. .05 - .06
Tallow, edible, tanks, dlvd .....lb. .09¾- .09¾
Inedible, fancy, bleachable, tanks. lb. .05¾- —
fancy, guaranteed, bulk, f.o.b. steamer..lb. .06¾ Nom.
dms., f.a.s. .....lb. .07¾ Nom.
tanks, dlvd. .....lb. .06¼- .06¼
No. 1, tanks, dlvd .....lb. .05 - —
Prime, tanks, dlvd .....lb. .05¾- —
Special tanks, dlvd .....lb. .05¾- —
Sulfonated, 25%, bbls., l.c.l. .lb. .08½- .08¾
50%, bbls., l.c.l. .....lb. .10½- .11

Tallow acids, dist., dms.	lb.	.13¼-	.15¼
tanks	lb.	.10¾-	—
Hydrogenated, dms.	lb.	.14¾-	.17¼
Tallow oil, acidless, dms., c.l.	lb.	.13½-	—
dms., l.c.l.	lb.	.14½-	.15½
Tangerine oil, Florida, dms.	lb.	4.75	- —
Tankage, animal, feeding, 9-11% ammonia, New York bulk, unit-ton.		4.75	- 5.00
Tannic acid, NF, fluffy, bbls., 1,000-lb. lots	lb.	2.05	- —
bbls., smaller lots	lb.	2.06	- 2.07
NF, powd., bbls., 1,000-lb. lots	lb.	1.95	- —
bbls., smaller lots	lb.	1.96	- 1.99
Tech., dms.	lb.	1.05	- —
Tansy oil, dms	lb.	6.60	- 8.00
Tar acid oil, 15-18%, dms., c.l., frt. equald	gal.	.53½-	—
dms., l.c.l., same basis	gal.	.55½-	—
tanks, same basis	gal.	.43½-	—
Tar acid oil, 25-28%, dms., c.l., same basis	gal.	.60	- —
dms., l.c.l., same basis	gal.	.62	- —
tanks, same basis	gal.	.50	- —
50-53%, dms., c.l., same basis	gal.	.75	- —
dms., l.c.l., same basis	gal.	.77	- —
tanks, same basis	gal.	.65	- —
Tar, coal (see Coaltar).			
Tartar emetic (see Antimony potassium tartrate).			
Tartaric acid, NF, 100-lb. bgs., c.l., frt. equald	lb.	.41	- —
bgs., 10,000 lbs. 1 shipt., same basis	lb.	.43	- —
bgs., smaller lots, same basis	lb.	.47	- —
Terpine hydrate, NF, cryst., powd., 100-lb. fib. dms	lb.	.70	- —
Terpineol, extra, dms	lb.	.50	- .60
Prime, dms.	lb.	.40	- .50
Terpinyl acetate, extra, cns., dms.	lb.	.64	- .75
Prime, dms.	lb.	.53	- .56
Terpinyl propionate, dms.	lb.	1.70	- —
Terra alba (see Gypsum).			
Testosterone, USP, bots.	gram.	No prices.	
Testosterone propionate, USP, bots.	gram.	No prices.	
Tetrachloroethane, dms., works	lb.	.14½-	—
Tetrasodium pyrophosphate (see Sodium pyrophosphate).			
Tetrachloroethylene, tech. (see Perchloroethylene).			
Tetrachloroethylene, USP, 55-gal. dms., c.l., t.l., works	lb.	.20½-	—
dms., l.c.l., works	lb.	.22	- .23½
Tetraethyl orthosilicate, dms., c.l., dlvd. E	lb.	.60	- —
dms., l.c.l., dlvd. E	lb.	.61½-	—
Tetraethyl pyrophosphate, 40%, cns., dms., frt. equald	lb.	.75	- —
Tetraethylenepentamine, dms., c.l., dlvd. E	lb.	.53½-	—
dms., l.c.l., dlvd. E	lb.	.55	- —
tanks, dlvd. E	lb.	.51	- —
Tetraethylthiuram disulfide, tech., dms., frt. alld	lb.	1.04	- —
Tetrahydrofuran, dms., c.l., t.l., works	lb.	.36½-	—
dms., l.c.l., or l.t.l., works	lb.	.37	- —
tanks, works	lb.	.35	- —
Tetrahydrofurfuryl alcohol, dms., c.l., t.l., Memphis, Tenn.	lb.	.31½-	—
dms., l.c.l., Memphis, Tenn	lb.	.32½-	—
dms., c.l., t.l., Newark, N.J.	lb.	.33½-	—
dms., l.c.l., Newark, N.J.	lb.	.34½-	—
tanks, dlvd. E. of Denver	lb.	.31	- —
tanks, dlvd. W. of Denver	lb.	.32	- —
Tetrahydrophthalic anhydride, dms., c.l., t.l., frt. alld. E	lb.	.39	- —
l.c.l., l.t.l., same basis	lb.	.41	- —
Tetrapotassium phosphate (see potassium phosphate).			
Thallium metal, dlvd	lb.	7.50	-10.00
Thallium sulfate, 99%, bots., dlvd.	lb.	5.00	-10.00
Theobromine, NF, fib. dms., 100-lbs., f.o.b., works	lb.	4.40	- 5.50
Theobromine and sodium acetate, USP, fib. dms., 500-lbs. works	lb.	6.45	- —
Theobromine, sodio-salicylate, NF, fib. dms., 500-lbs., works.	lb.	3.80	- —
Theophyline, USP, anhyd., 100-lb. dms., frt. alld	lb.	3.65	- —
Thiamine hydrochloride, USP, fib. dms., frt. alld	kilo.	36.00	- —
USP, ampule grade, fib., dms., frt. alld	kilo.	38.00	- —
Thiamine mononitrate, USP, fib. dms., frt. alld	kilo.	36.00	- —
Thiocarbanilide, dms., ton lots	lb.	.72	- —
dms., less ton lots	lb.	.74	- —
Thiodiphenylamine (see Phenothiazine).			
Thioflavin green toner, brilliant, molybdated, PMA, kgs., works	lb.	5.20	- —
Tungstated, PTMA, kgs., works	lb.	6.20	- —
Thioglycolic acid, refd., 55 gal. dms., ton lots, 100% basis	lb.	1.15	- —
Thiosalicylic acid, 80%, dms., 1,000-lb., lots, works	lb.	4.00	- —
Thiourea, tech., bgs., t.l., frt. alld.	lb.	.30	- —
bgs., ton lots, same basis	lb.	.32	- —
bgs., less than ton lots, same basis	lb.	.33	- —
Thorium nitrate, purif., fib. dms., 100-lb. lots or more, works	lb.	3.50	- —
dl-Threonine, bots., 1-kilo lots	kilo.	275.00	- —
Thyme leaves, French, bgs	lb.	.25	- —
Spanish, bgs.	lb.	.09	- —
Thyme leaves, bgs.	lb.	.29	- —
Spanish, bgs.	lb.	.11	- —
Thyme oil, NF, red, cns., dms	lb.	1.90	- 2.25
NF, white, cns.	lb.	2.20	- 2.60
Tech., white, cns.	lb.	.40	- 1.55
Thymol, fib. dms., 25-lbs., f.o.b. works	lb.	3.06	- —
Thymol iodide, NF, dms., 100-lbs. f.o.b. works	lb.	7.40	- —
Timbo root (see Cube root).			
Tin chloride (see Stannous chloride, anhyd.).			
Tin crystals (see Stannous chloride, hydrous).			
Tin metal (Straits)	lb.	1.02	- —
Tin oxide (see Stannic oxide).			
Tin sulfate (see Stannous sulfate).			
Tin tetrachloride, anhyd. (see Stannic chloride, anhyd.).			
Titanium dioxide, anatase, ceramic, bgs., c.l., dlvd.	lb.	.25½-	—
bgs., l.c.l., dlvd.	lb.	.26½-	—
reg., bgs., c.l., dlvd.	lb.	.25½-	—
bgs., l.c.l., dlvd.	lb.	.26½-	—
metallurgical, nat., bgs., c.l., f.o.b. Jacksonville, Fla.	ton.	180.00	- —
bgs., 5-ton lots, Niagara Falls, N. Y.	ton.	205.00	- —
bgs., ton lots, same basis.	ton.	215.00	- —
Milled metallurgical titanium dioxide $7.50 per ton higher.			
Titanium dioxide, rutile, nonchalking, bgs., c.l., dlvd. E	lb.	.27½-	—
bgs., l.c.l., dlvd. E	lb.	.28½-	—
Titanium dioxide-calcium pigment, 30% Ti O_2, reg., bgs., c.l., dlvd.	lb.	.09¾-	—
bgs., l.c.l., works	lb.	.09⅞-	—
80% Ti O_2, high-tinting, dms., c.l.,	lb.	.14¾-	—
dms., l.c.l.	lb.	.14⅞-	—
Titanium hydride, powd., dms., works	lb.	8.10	- 9.00
Titanium tetrachloride, tech., dms., c.l., works	lb.	.26	- —
dms., l.c.l., works	lb.	.27½-	.29
tanks, works	lb.	.20	- —
Tobias acid, dms., c.l., t.l.	lb.	.78	- —
dms., l.c.l.	lb.	.81	- —
d-a-Tocopherols, NF, mixer, conc., pure basis, bots	kilo.	67.00	- —
d-a-Tocopheryl acetate, NF, conc., pure basis, bots	kilo.	122.00	- —
d-a-Tocopheryl acid succinate, cryst., bots	kilo.	109.00	- —
dl-a-Tocopherol, bots.	kilo.	99.00	- —
dl-a-Tocopheryl acetate, bots	kilo.	90.00	- —
25% dry, powd., bots	kilo.	22.50	-24.00
33% dry, powd., bots.	kilo.	30.00	-31.50
o-Tolidine base, dry, kgs., 100% basis	lb.	1.55	- —
Paste, kgs., 100% basis	lb.	1.50	- —

TOLUOL

Toluol quotations, both coaltar and petroleum, may be found under Toluene.

o-Tolidine, hydrochloride paste, kgs., 100% basis	lb.	1.50	- —
Tolu balsam, cns.	lb.	3.50	- 3.65
Toluene, coaltar, indust., or nitration, tanks, dlvd. E. of Rockies	gal.	.25	- —
Toluene, petroleum, indust., tanks, dlvd. E. of Rockies	gal.	.25	- —
p-Toluenesulfonamide, powd., dms., t.l., works	lb.	.60	- —
dms., l.t.l., same basis	lb.	.63	- —
Toluenesulfonic acid, 55-gal. dms., t.l., frt. alld	lb.	.16	- —
1,000-lb. or more, same basis	lb.	.18	- —
less than 1,000-lb., same basis	lb.	.23	- —
tanks, same basis	lb.	.14	- —
Toluenesulfonic acid in 10-gal. dms., 2c. per lb. more.			
p-Toluenesulfonic acid monohydrate, dms., c.l., or t.l.	lb.	.90	- —
dms., 125 lbs. to t.l.	lb.	1.00	- —
m-Toluidine, dms., c.l., works, frt. alld	lb.	.83	- —
dms., l.c.l., same basis	lb.	.84	- —
tanks, same basis	lb.	.82	- —
o-Toluidine, dms., c.l., works, frt. alld	lb.	.30	- —
dms., l.c.l., same basis	lb	.31	- —
tanks, same basis	lb.	.23	- —
p-Toluidine, tech., flake, dms., frt. alld	lb.	.50	- —
Cast, dms., frt. alld.	lb.	.45	- —
p-Toluidine-m-sulfonic acid, dms., works	lb.	.92	- 1.04
Toluidine red toner, deep shades, kgs., works	lb.	1.70	- —
Light shades, kgs, works	lb.	1.70	- —
2,4-Tolylenediamine, cryst., fib. dms., l.c.l., frt. alld	lb.	1.10	- —
Tonka beans, Angostura, cks.	lb.	1.50	- —
Brazilian, Surinam, cs.	lb.	1.30	- —
Totaquine, 100-oz. lots, cns.	oz.	.42	- —
Toxaphene, dms., c.l., t.l., works.	lb.	.22	- —
dms., l.c.l., l.t.l., works	lb.	.28	- —
Tragacanth gum, No. 1, ribbons, cs.	lb.	4.10	- 4.20
No. 2, cs.	lb.	3.75	- 3.80
No. 3, cs.	lb.	3.40	- 3.65
USP, powd., bbls.	lb.	1.05	- 1.15
Triacetin dms., c.l., dlvd. E. of Rockies	lb.	.39	- —
dms., l.c.l., same basis	lb.	.40	- —
tanks, same basis	lb.	.37	- —
Triallylamine, dms., c.l., dlvd.	lb.	.985	- —
dms., l.c.l., dlvd.	lb.	.995	- —
tanks, dlvd.	lb.	.96	- —
Tributyl citrate, tech., non-ret. dms., ▲ c.l., frt. alld. E. of Denver.	lb.	.42½-	—
non-ret. dms., l.c.l., frt. alld. E. of Denver	lb.	.43½-	—
tanks, frt. alld. E. of Denver	lb.	.40	- —
Tributyl phosphate, dms., c.l., works.	lb.	.52½-	—
dms. l.c.l., same basis	lb.	.53½-	—
tanks, same basis	lb.	.50	- —
Tributylamine dms., c.l., works	lb.	.67½-	—
dms., l.c.l., same basis	lb.	.69	- —
tanks, same basis	lb.	.65	- —
Tributyrin, dms., l.c.l., dlvd.	lb.	.69	- —
Trichloroacetic acid, bots	lb.	2.00	- 2.50
Trichlorobenzene, dms., c.l., frt. alld. E	lb.	.15	- —
dms., l.c.l., frt. alld. E.	lb.	.16	- —
tanks, frt. alld. E.	lb.	.13¼-	—
Trichlorobenzene prices in the West 1¾c. higher.			
1,1,1-Trichloroethane, dms., c.l., dlvd.	lb.	.13¼-	—
dms, l.c.l., dlvd.	lb.	.16¼-	—
tanks, dlvd.	lb.	.12¼-	—

FOR A TRULY
MULTI-PURPOSE
WHITE PIGMENT
SPECIFY

TITANOX*-RA-50

TITANOX-RA-50—the rutile titanium dioxide pigment—is *doubly* versatile. Not only is it a favorite for many different types of coatings, but also for finishes that must perform multiple services. For example, many industrial product finishes must retain their good appearance and durability both indoors and outdoors. TITANOX-RA-50 helps them do just that.

This truly multi-purpose white pigment is a favorite because of these outstanding characteristics:

- **fast wetting**
- **extreme fineness of grind**
- **high whiteness**
- **reduction of after-yellowing of vehicles**
- **high resistance to chalking, without significant loss of tint clarity.**

These qualities make TITANOX-RA-50 ideal for whitening, brightening and opacifying:

- **Paints . . . water emulsion paints and coatings, interior-exterior enamels, industrial finishes of all types, white and tinted exterior house paints, porch and deck enamels and maintenance paints.**
- **Paper . . . particularly latex and other types of coatings to be used for containers, wrappers and packages.**
- **Plastics . . . especially vinyl sheeting and floor coverings.**

Our Technical Service Department is always glad to help you with your pigmentation problems. There's a TITANOX pigment for anything that needs whitening, brightening or opacifying. Titanium Pigment Corporation, 111 Broadway, New York 6, N. Y.; offices and warehouses in principal cities. In Canada: Canadian Titanium Pigments, Ltd., Montreal.

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®TITANOX
the brightest name in pigments

TITANIUM PIGMENT CORPORATION
Subsidiary of NATIONAL LEAD COMPANY

1,1,2-Trichloroethane—Vitamin B_{12}

1,1,2-Trichloroethane, dms., c.l., works..lb. .13½- —
dms., l.c.l., divd. E..lb. .14½- —
tanks, works..lb. .11½- —
Trichloroethylene, dms., c.l., or t.l., divd..lb. .14 - —
dms., l.c.l., divd..lb. .15¼- —
tanks, divd..lb. .12¾- —
Trichloroisocyanuric acid, dms., c.l., t.l., frt. equald..lb. .65 - —
dms., l.c.l., same basis..lb. .75 - —
Trichlorophenoxyacetic acid (see 2,4,5-T).
Tricholine citrate, 65% soln., ret. cbys., works, frt. adjusted. lb. 1.40 - 1.45
Tricresyl phosphate, coaltar, dms., c.l., divd..lb. .35 - —
dms., l.c.l., divd..lb. .36 - —
tanks, divd..lb. .32½- —
Tricresyl phosphate, petroleum, dms., c.l., divd..lb. .34½- —
dms., l.c.l., divd..lb. .35½- —
tanks, divd..lb. .32½- —
Tridecyl alcohol, mixed isomers, dms., c.l., divd. E..lb. .26½- —
dms., l.c.l., divd. E..lb. .28 - —
tanks, divd. E..lb. .24 - —
Triethanolamine, dms., c.l., divd. E. lb. .24½- —
dms., l.c.l., same basis..lb. .26 - —
tanks, same basis..lb. .22 - —
Triethanolamine lauryl sulfate, dms., c.l., t.l., frt. alld..lb. .25½- —
dms., l.t.l., frt. alld..lb. .26½- —
tanks, frt. alld..lb. .24½- —
Triethylamine, dms., c.l., divd. E. lb. .50 - —
dms., l.c.l., same basis..lb. .51½- —
tanks, same basis..lb. .47½- —
Triethyl nitrate, refd., tech., non-ret. dms., c.l., frt. alld. E. of Denver..lb. .46¼- —
non-ret. dms., l.c.l., frt. alld. E. of Denver..lb. .47¼- —
tanks, frt. alld. E. of Denver. lb. .43¾- —
Triethyl phosphate, dms., c.l., divd. lb. .40½- —
dms., l.c.l., divd..lb. .41½- —
tanks, divd..lb. .38 - —
Triethylene glycol, dms., c.l., divd. E..lb. .21 - —
dms., l.c.l., divd. E..lb. .22½- —
tanks, same basis..lb. .18½- —
Triethylenetetramine, dms., c.l., divd. E..lb. .51½- —
dms., l.c.l., divd. E..lb. .53 - —
tanks, divd. E..lb. .49 - —
Triisobutylene, tanks, divd..lb. .08 - —
Tri-isopropanolamine, dms., c.l., divd. E..lb. .23¼- —
dms., l.c.l., divd. E..lb. .24¾- —
tanks, divd. E..lb. .20¾- —
Trimethylamine, anhyd., cyls., l.c.l., frt. equald, 100% basis lb. .30 - .305
tanks, frt. equald, 100% basis. lb. .26 - —
25-40% soln., dms., c.l., frt. equald, 100% basis..lb. .35 - —
dms., l.c.l., frt. equald, 100% basis..lb. .35½- —
tanks, 100% basis, frt. equald..lb. .26 - —
Trimethylolpropane, dms., c.l., t.l., divd. E..lb. .35 - —
dms., l.c.l., l.t.l., same basis..lb. .36 - —
Trioxanes, pure, dms., c.l., t.l., works..lb. .50 - —
dms., l.c.l., works..lb. .51½- —
Tripentaerythritol, bgs., c.l., t.l., divd. E..lb. .40 - —
bgs., l.c.l., l.t.l., divd. E..lb. .41 - —
Triphenyl phosphate, bbls., c.l., frt. equald..lb. .41½- —
bbls., l.c.l., frt. equald..lb. .43½- —
Triphenylguanidine, bbls., works lb. .90 - —
Tripropylene, dms., c.l., divd. E..gal. .44 - —
dms., l.c.l., same basis..gal. .54 - —
tanks, same basis..gal. .28 - —
Tripropylene glycol, dms., c.l., t.l., frt. alld. E..lb. .20½- —
dms., l.c.l., l.t.l., frt. alld. E..lb. .22 - —
tankcars and compartmented tankcars, frt. alld. E..lb. .17½- —
Tripropylene glycol, tankwagon and compartmented tankwagons, 1,000 gals. min. frt. alld. E..lb. .18 - —
Tripropylene glycol prices 1c. per lb. higher in west.
Trisodium phosphate (see Sodium phosphate tribasic).
dl-Tryptophane, fib., dms., works lb. 55.00 - —
Tung oil, dms., New York..lb. .24½- .25
tanks, imported, N. Y..lb. .23 - —
tanks, domestic, mills..lb. .22⅝- —
Tungsten metal, powd., 2.0-2.5 microns, dms., works..lb. 4.25 - —
Tungstic acid, tech., dms., 1,000-lb. lots, works..lb. 2.25 - —
dms., smaller lots, works..lb. 2.45 - —
Turkey red, bbls., works..lb. .62 - —
Turpentine, gum (see Protective Coatings market, Naval Stores).
Turpentine oil, NF, cns., dms..lb. .38 - .39
Tuscan red, bbls., frt. equald..lb. .26 - .28
Tyrothricin, USP, 1 to 5 kilos..gram. .54 - —

U

Ultramarine blue, cobalt type, dry or pulp, 250-lb. bbls., divd. E. of Rockies..lb. .35 - .39¼
Jobbing types, bbls., same basis..lb. .19 - —
Regular types, dry bbls., same basis..lb. .22½- .35
Ultramarine blue prices 1c. higher W. of Rockies.
Umber pigment, burnt, American, bgs., c.l., works..lb. .07½- .07¾
bgs., l.c.l., works..lb. .07¾- .08
Umber pigment, burnt, turkey-type, bgs., c.l., Boston, Bethlehem, Easton, Pa., Hiwassee, Va., N. Y..lb. .08¼- —
Raw, American, bgs., works..lb. .07¾- .08¼
Turkey-type, bgs., works..lb. .08½- .08¾
Undecylenic acid, dms..lb. 1.28 - —
Unicorn root, false (see Helonias root).
Unicorn root, true (see Aletris root).
Urea, 46% N, indust., bgs., c.l., t.l., divd. E..ton. 125.00 - —
bgs., l.c.l., divd. E. ex whse. ton. 145.00 - —
45% N, agricultural, bgs., c.l., (30 tons) divd. E..ton. 103.00 - —
Urea-ammonia liquor A, B, C & F grades, N basis, tanks, frt. equald..ton. 120.00 - —
37 grade, tanks, same basis..ton. 145.00 - —
Urethane, USP, dms., t.l., f.o.b., works..lb. .65 - —
dms., l.t.l., same basis..lb. .70 - —
Uva-ursi leaves, bls..lb. .12 - —

V

Valerian root, Belgian bgs..lb. .32 - —
Indian, bgs..lb. .25 - —
dl-Valine, dms., works..lb. 21.00 - 27.50
Vanadium pentoxide, tech., dms., works..lb. 1.38 - —
Vandyke brown, bbls., works..lb. .09½- .12
Vanilla beans, Bourbon, tins..lb. 11.25 - —
Mexican cuts, tins..lb. 11.50 - —
whole, tins..lb. 12.00 - —
Vanillin ex lignin, 100-lb. fib. dms., 1,000-lb. lots or more..lb. 3.00 - —
100-lb. fib. dms., 500-lb. lots..lb. 3.10 - —
100-lb. fib. dms., cns. 100-lb. lots..lb. 3.25 - 3.35
Venetian red, jobbing, bgs., works. lb. .0475- —
Venetian red, 20%, bgs., works..lb. .0525- —
25%, bgs., works..lb. .0375- —
30%, bgs., works..lb. .06 - —
35%, bgs., works..lb. .0625- —
40%, bgs., works..lb. .0675- —
Vetiver oil, Bourbon, cns..lb. 17.25 - 17.50
Haitian, cns..lb. 14.50 - 15.50
Victoria blue toner, molybdated, PMA 250-lb. bbls., divd. E. of Rockies..lb. 4.50 - 4.95
Tungstated, PTMA, 250-lb. bbls., divd. E. of Rockies..lb. 5.55 - —
Victoria blue toner, bbls., prices 1c. higher W. of Rockies.
Vinyl acetate monomer, zone 1, 55-gal. dms., c.l., divd..lb. .20 - —
55-gal. dms., l.c.l., divd..lb. .21½- —
tanks, divd..lb. .17½- —
tanktrucks less than 4,000 gal., divd..lb. .18 - —
Zone 2, 55-gal. dms., c.l., divd..lb. .21 - —
55-gal. dms., l.c.l., divd..lb. .24 - —
tanks, divd..lb. .18½- —
Vinyl acetate monomer, zone 2, tanktrucks, less than 4,000 gals..divd..lb. .19 - —
Zone 1 is all continental US except zone 2, zone 2 comprises Ariz., Calif., Idaho, Mont., Nev., Ore., Utah and Wash.
Vinyl n-butyl ether, tech., dms., l.c.l., works..lb. .50 - —
Vinyl chloride monomer, tanks, works..lb. .125 - —
Vinyl ether USP, anethesia, bots., 50cc., hospitals..bot. 1.12 - —
bots., 75cc., hospitals..bot. 1.56 - —
Vinyl ethyl ether tech. dms., c.l., works..lb. .29¼- —
dms., l.c.l., works..lb. .30 - —
tanks, works..lb. .27¼- —
Vinyl propionate monomer, dms., c.l., divd..lb. .49 - —
dms., l.c.l., same basis..lb. .50 - —
tanks, same basis..lb. .47 - —
Vinyl trichloride (see Trichloroethane).
2-Vinylpyridine, 10 dms. to tanks, works..lb. 1.20 - —
1 to 9 dms., works..lb. 1.35 - —
tanks, works..lb. 1.15 - —
Vinyltoluene, dms., c.l., f.o.b., works. lb. .16½- —
dms., l.c.l., same basis..lb. .18½- —
tanks, f.o.b. dest. frt. prepaid..lb. .14 - —
Viosterol in nat. vegetable oil, 1,000,000 D units per gram, bots., lots of 10 billion USP units..1,000,000 units. .02½- —
Virginia type red, bbls., works..lb. 1.40 - —
Vitiamin A acetate, syn., cryst., beads, 500,000 A units per gram..gram .07¼- —
Vitamin A acetate, dry, 500,000 units per gram, kilo lots..kilo. 65.00 - —
325,000 units per gram, same basis..kilo. 43.88 - —
250,000 units per gram, same basis..kilo. 33.75 - —
Dry vitamin A acetate in less than kilo lots, $1.25 to $2.50 per kilo higher.
Vitamin A, liq. in oil, 1,000,000 A units per gram..1,000,000 units. .09½- —
Vitamin A palmitate, liq., 1,000,000-1,800,000 A units per gram..1,000,000 units. .09½- —
Vitamin B_1 (see Thiamine hydrochloride).
Vitamin B_2 (see Riboflavin and Yeast).
Vitamin B_{12}, cryst., USP (cyanocobalamin), 1-50 grams, vials, tins..gram. 95.00 - —
0.1% vitamin B_{12}, USP, adsorbed on gelatin, 100 and 500-gram bots on 1-5 kilo dms..gram. 1.14 - —
0.1% vitamin B_{12}, USP adsorbed on resin, 100 and 500-gram bots., 1-5 kilo dms..gram. 1.14 - —
Vitamin B_{12}, oral grade solids in containers of 1 and 10 gram of B_{12} activity gram. 85.00 - —
0.1% trituration of cryst., B_{12} with dicalcium phosphate or mannitol, 1-10..kilo. 109.00 - —

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Vitamin B_{12}, 0.1% cobalamin concentrate, NF, adsorbed on resin, 500-gram bots., 1-5 kilo, dms., frt. alld..gram. .90 • —
0.1% cobalamin concentrate in gelatin, 1-10 kilo. dms., frt. alld..gram. .90 • —
Vitamin C (see Ascorbic acid).
Vitamin D_2 (see Codliver and Fishliver oils, Calciferol and Viosterol).
Vitamin D, dry, 850,000 units per gram, kilo lots..kilo.42.50 • —
850,000 units per gram less than kilo lots..kilo.45.00 • —
Vitamin E (see a-Tocopherol and Wheat germ oil).
Vitamin H (see Biotin).
Vitamin K, active (see Menadione).
Violet methyl toner (see Methyl violet toner).
VM&P naphtha (see Naphtha, VM&P, petroleum).

W

Wahoo root bark, bls. .....lb. 2.00 - 2.25
Warfarin, 0.5%, dms., 50-lb. lots, dlvd..lb. 1.95 • —
dms., 25-49-lb. lots, New York or Chicago..lb. 2.05 • —
dms., 5-24-lb. lots, New York or Chicago..lb. 2.15 • —
Watchung-type reds., bbls.....lb. 1.95 • —

WAXES
Wax quotations are listed individually. For example, prices on Wax, carnauba, may be found in the C's under Carnauba wax.

Wheat germ oil, 5-gal. dms. ..gal.12.25 • —
White lead (see Lead, white).
White mineral oil (see Mineral oil, white).
White pine bark, rossed, bls.... lb. .21 • .22
White precipitate, USP, powd., dms., 100 lbs., f.o.b. works lb. 5.50 • —
Whiting (see Calcium carbonate).
Wild cherry bark, thin, nat., bls..lb. .22 • —
Thin, rossed, bls. .....lb. .22 Nom.
Wintergreen oil, USP nat. northern, cns..lb. 6.35 -17.50
USP, nat. southern cns .....lb. 3.75 - 7.00
Wintergreen oil, syn. (see Methyl salicylate).
Witch hazel bark, bls .....lb. .16 • .17
Witch hazel leaves, bls. .....lb. .25 • —
Wollastonite fine bgs., c.l., works, ton.39.50 • —
bgs., l.c.l. ex whse.....ton.56.00 • —
Medium, bgs.. c.l., works....ton.27.00 • —
bgs., l.c.l., ex whse. .....ton.44.00 • —
Wood alcohol (see Methanol).
Wood oil (see Tung oil).
Woolfat crude (see Degras).
Woolfat USP (see Lanolin).
Wormseed Levant bgs. .....lb. 2.50 • —
Wormseed oil (see Chenopodium oil NF).
Wormwood oil, cns .....lb. 4.75 - 5.00

X

Xylene coaltar, indust., tanks, works:
Bethlehem, Pa. .....gal. .29 • —
Birmingham dist. .....gal. .29 • —
Chicago dist. .....gal. .28½- —
Cleveland dist. .....gal. .29 • —
Geneva, Utah.....gal. .29 • —
Johnstown, Pa. .....gal. .29 • —
Lackawanna, N. Y .....gal. .29½- —
Xylene, coaltar, indust., tanks, works:
Lone Star, Tex. .....gal. .27 • —
Lorain, Ohio .....gal. .29 • —
Middletown, Ohio.....gal. .30 • —
Minnequa, Col. .....gal. .29 • —
Philadelphia dist. .....gal. .29 • —
Pittsburgh dist. .....gal. .29 • —
Sparrows Point, Md. ...gal. .29 • —
Terre Haute, Ind. .....gal .29 • —
Youngstown, Ohio.....gal. .29 • —
Xylene, petroleum, indust., tanks f.o.b. works:
Bayonne, N. J .....gal. .29 • —
Baytown, Tex. .....gal. .27 • —
Charleston, S. C. .....gal. .29 • —
Chicago, Ill .....gal. .28½- —
Detroit, Mich., dlvd....gal. .27½- .29
Houston, Tex. .....gal. .27 • —
Philadelphia, Pa. .....gal. .29 • —
Providence, R. I. .....gal. .30 • —
Sewell's Point, Va. ....gal. .28 • —
Wood River, Ill. .....gal. .28½- —
m-Xylene, 95%, dms., c.l., f.o.b., Richmond, Calif..lb. .25 • —
dms., l.c.l., f.o.b., Richmond, Calif..lb. .26 • —
tanks, frt. alld. .....lb. .23 • —
o-Xylene, dms., c.l., works.....lb. .08 • —
dms., l.c.l., works.....lb. .09 • —
tanks, works.....lb. .06 • .06½
p-Xylene, dms., c.l., works.....lb. .20 • —
dms., l.c.l., works.....lb. .21 • —
tanks, frt. alld. .....lb. .1645- —
Xylenol, cryst., 45°-47°C., m.p., dms., l.c.l., works lb. .23 • —
56°-58°C., m.p., dms., l.c.l., works, frt. equald lb. .33 • —
Xylenol, cryst., 60°-62°C., m.p., dms., l.c.l., same basis. lb. .40 • —
Xylenol fraction, b.r. 7°-9° C., dry above 227° C., dms., c.l., same basis..gal. 1.25 • —
dms., l.c.l., same basis..gal. 1.30 • —
tanks, same basis .....gal. 1.05 • —
b.r. 7°-9° C., dry at or below 227° C., dms., c.l., same basis. gal. 1.35 • —
Xylenol fraction, b.r. 7°-9° C., dry at or below 227° C., dms., l.c.l., same basis..gal. 1.40 • —
2,4-Xylidine, tech., dms., frt. alld. lb. 1.15 • —
2,5-Xylilne, tech., dms., frt. alld. lb. 1.20 • —
Xylidines, mixed, o-m-p, dms., c.l., or t.l., works..lb. .39 • —
dms., l.c.l., same basis.....lb. .40 • —
tanks, same basis.....lb. .33 • —

XYLOL
Xylol quotations, both coaltar and petroleum, may be found under Xylene.

Y

Yara yara oil, cns. .....lb. 2.15 - 3.05
Yeast, brewers, debittered, USP XV, Saccharomyces, dlvd..lb. .27 • —
primary, USP XV, 150 mcg. B_1 per gram, 100-lb. dms..lb. .47 • —
USP XV, 270 mcg., B_1 per gram, 100-lb. dms..lb. .52 • —
USP XV, 300 mcg., B_1 per gram, 100-lb. dms..lb. .56 • —
USP XV, 900 mcg., B_1 per gram, 100-lb. dms. ....lb. .60 • —
Torula, USP, dlvd. .....lb. .18 • —

YELLOW PIGMENTS
Yellow pigment quotations are listed individually. For example, prices on Yellow, benzidine, may be found in the B's under Benzidine yellow.

Yerba santa leaves, bls. .....lb. .40 • .45
Ylang-ylang oil, Bourbon, bots...lb. 7.00 -22.00
extra, bots. .....lb.24.00 -33.00
extra, bots. .....lb.24.00 -33.00
Yohimbine hydrochloride, bots., tins. oz. 3.75 - 4.25

Z

Zein, bgs., 36,000-lb. lots or more, bgs., 500-lb. lots or more, dlvd..lb. .343 • —
bgs., smaller lots, dlvd.....lb. .373 • —
Zinc acetate, NF, VIII, dms.....lb. .53 • —
Tech., dms., l.t.l., works.....lb. .29¾- —
Zinc borate, bgs., 1,000 lbs or more, works..lb. .25 • —
bgs., less than 1,000 lbs., same basis..lb. .27 • —
Zinc chloride, NF, gran., dms...lb. .42 • —
NF, precip., powd., dms.....lb. .26 • —
Tech., soln., 50%, dms., c.l., works..100 lbs. 5.80 • —
dms., l.c.l., works..100 lbs. 6.40 • —
tanks, works .....100 lbs. 5.15 • —
fused, dms., c.l., works..100 lbs.10.70 • —
dms., l.c.l., works..100lbs.11.20 • —
gran., fib. dms., c.l., works. 100 lbs.11.45 • —
fib. dms., l.c.l., works..100 lbs.11.95 • —
Zinc chromate bbls., dlvd. .....lb. .29 • —
Basic bbls., dlvd. .....lb. .34 • —
Zinc cyanide dms. 1,000-lb. lots or more, works..lb. .55 • —
dms., smaller lots, works.....lb. .57 • —
Zinc dust coml. bbls., c.l., works, lb. .17 • —
Pigment, bbls., c.l., works....lb. .16½- —
bbls., l.c.l., works.....lb. .18½- —
Zinc fluoride, bbls., works.....lb. .49 • .50
Zinc hydrosulfite, dms., c.l., frt. alld..lb. .21½- —
dms., l.c.l., frt. alld. .....lb. .23½- —
Zinc metal prime western, slabs, E. St. Louis..lb .13 • —
Prime western slabs, New York, lb. .13½- —
Zinc naphthenate liq. 8% Zn., dms., frt. alld..lb. .27 • —
10% Zn., dms., frt. alld. ....lb. .33 • —
Zinc nitrate tech. cryst., bbls., works..lb. .20 • —
Zinc oxide, pigment, American process, lead-free bgs., c.l., frt. alld..lb .14½- —
bgs., l.c.l., 10 tons or more, same basis..lb. .15 • —
bgs., l.c.l., smaller lots, same basis..lb. .15½- —
leaded, 35% bgs, c.l., mills, frt. alld..lb. .15⅝- —
bgs., l.c.l., 10 tons or more, same basis..lb. .15⅞- —
Zinc oxide, leaded, 50%, bgs., c.l., same basis..lb. .15¾- —
Zinc oxide, pigment, American process, leaded, 50%, bgs., l.c.l., 10 tons or more, same basis..lb. .16¼- —
USP, gran., dms. .....lb. .26 • —
French process, green seal, bgs., c.l., mills, frt alld..lb. .16¼- —
bgs., l.c.l., 10 tons or more, same basis..lb. 16¾- —
bgs., l.c.l, smaller lots, same basis..lb. .17¼- —
red seal, bgs., c.l., same basis. lb. .15¾- —
bgs., l.c.l., 10 tons or more, same basis..lb. .16¼- —
bgs., l.c.l, smaller lots, same basis..lb. 16¾- —
white seal, bgs., c.l., same basis..lb .16¾- —
bgs., l.c.l., 10 tons or more, same basis..lb .17¼- —
bgs., l.c.l., smaller lots, same basis..lb .17¾- —
Zinc oxide, USP dms., c.l., frt. alld. lb. .18¼- —
dms., l.c.l., 10 tons or more, same basis..lb .18¾- —
dms., l.c.l., smaller lots, same basis..lb. .19¼- —

—Continued on page 62

Get the properties you want most in your formulations with...

AZO lead-free ZINC OXIDES

the paint industry's most versatile line

GRADE (Lead-free)	BULK DENSITY lbs./cu. ft.		PARTICLE SHAPE	PARTICLE SIZE	OIL ABSORPTION (Rub Out Method)	FOR PAINT CONSISTENCY (Rated High to Low)
	Conventional	AZODOX*				
AZO-22	20	35	Acicular	Long	21	5
AZO-11	23	40	Acicular	Medium	18	4
AZO-33	27	46	Acicular	Short	16	3
AZO-55	32	60	Nodular	Small	14	2
AZO-55-LO	36	65	Nodular	Medium	12	1
AZO-66 (French)	28	—	Nodular	Fine	12	—
AZO-77 (French)	24	—	Nodular	Fine	12	—

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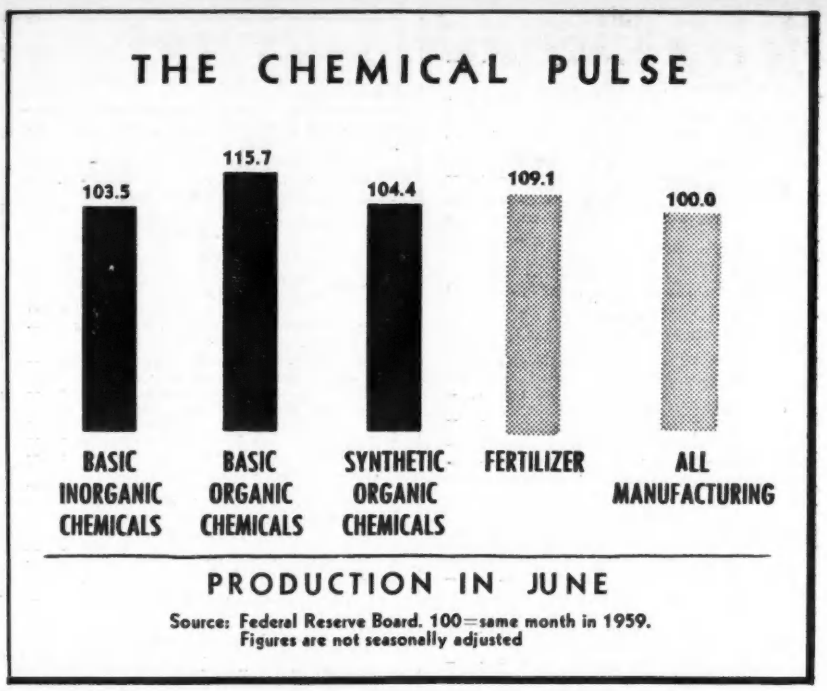

What Does FDA Need

When one has read the six items in OPD last week having to do with the purposes, projects and procedures of the Food & Drug Administration, he will be well on his way toward agreeing with the opinion attributed in one of them (on page 3) to leaders of the drug industry, that the agency needs additional money so that it may be enabled to function more effectively. But, depending largely upon what he has read anywhere over the past several months, he is not likely to go along with what the drug men are reported at least to feel about the agency's need for any expansion of the area, the scope or the nature of its functioning.

If he be inclined to put results first in any appraisal of a regulative program, it is to be expected that his suggestion for a desirable answer to the problem would be that the busy agency be replaced by three new ones, whose duties would have to do respectively and solely with (1) drugs, (2) foods and (3) cosmetics.

Consider the enormous expansion of the direct public service functioning of drug manufacturing over the past few decades, plus the confusion that has been and still is being caused by the numerous factors in the various problems attending the big job of endeavoring to deal with direct and indirect, intentional and accidental introduction of dubiously potential additives into all sorts and conditions of human supplies.

About two months ago, the British Minister of Health was asked in Commons if he intended to introduce resolutions to require that all new drugs be tested and evaluated by a responsible body before they are offered for sale to the public. The pure drug problem is not solely one of USA concern. The official's reply was that his present powers did not authorize any such regulatory action; but he was giving every encouragement toward improvements in existing facilities for clinical trials. He said that the central and Scottish councils on health services had agreed to extend the terms of reference and membership of the standing joint committee on the classification of proprietary preparations to enable that agency to assist.

Available information does not provide anything definite on the structual, operational or official status or relationship of the three institutions which he mentions. It would seem, however, that the Pharmaceutical Manufacturers Association, the Food & Drug Administration—and the Secretary of Health, Education & Welfare, whose complexities outnumber and outdo those of his FDA division—would be wise to find out all about the what's and the how's of the apparently tripartite, somehow officiating regulatory setup.

Exporting Chemicals

What Washington talked over in last week's issue with reference to the difficulties faced by the US chemical industry in endeavoring to do business abroad does not contribute very much toward making the President's export expansion program chemically practicable. It does get at least a bit of helpful supplementing by way of the lesson that underlies the news item on page 5 which has to do with what the executive of a chemical company did, saw and learned during a recently completed business going-about in Europe. And that sheds light on the why of the trend in chemical exports reported on page 7. Those who want to get an adequate measure of potentially instructive information along that line should read the July 2 issue of *Foreign Trade*, official publication of the Canadian Department of Trade and Commerce. It presents a most timely and pertinent review of business conditions in sixteen European countries, under the title—"Western Europe—A Year of Recovery."

To get down to baserock in the matter of chemical exporting, one must recognize what is the effect on trends in foreign trade of the influential relativity of reciprocity reached in negotiations under the General Agreement on Tariffs & Trade and of retaliation engendered by the reported demands of US industrial groups for insurmountable tariff protection against imports. If the chemical industry were officially allowed direct advisory representation in the GATT negotiating, it could also be a listener and could learn much that it should know about the why's of what it is faced with in seeking to promote the marketing of its products in other countries.

Governmental participation in the program of export trade promotion does have more than a little weight as a factor of influence. But, in large part, it is guidance, rather than assistance for domestic industry. It must be accepted as advisory. Under the free enterprise system, that is what it should be. The operating members of the groups which constitute that system should—and must—do what is needed by and required of them: self-help is a sine qua non in all commercial endeavors—and it must be recognized that, as an industrial executive said recently, "there's just as much chance to increase efficiency in distribution as in manufacturing; but it requires a different approach." It is a social, rather than a technical, functioning. In export markets, that approach must have personal identity as a substantial factor, plus understanding of and respect for nationalistic characteristics.

In any endeavor to analyze the problems of the reported difficulties in satisfactory exporting of chemicals, two basic questions arise. (1) Has the chemical industry been participating adequately and appropriately in the trade fairs and trade missions conducted by agencies of the federal government in foreign markets—or even reading what the Department of Commerce reports on those operations? (2) What part has the chemical industry had in the puzzling of a prominent steamship line over the fact that its mobile trade fair project, which offered to carry and display without any charge the products of US manufacturers at ten ports around the world, lagged seriously because of "inertia and apathy" with respect to the plan on the part of "most of the more than a thousand manufacturers who were invited to participate?"

Even Heaven cannot be expected to help those who do not help themselves.

Washington Talks It Over

Tariff Commission at Long Last Is Given the 'Go-Ahead' by the Bureau of the Budget to Continue Collecting and Publishing Data on Output, Shipments and Sales of Synthetic Organic Chemicals.

By Ralph L. Cherry
Washington Editor

Tariff Commission has been publishing and gathering figures on production, shipments and sales of synthetic organic chemicals ever since President Woodrow Wilson gave a push to setting up the industry in this country just after World War I. The commission is going to keep the job for at least another year, if not longer.

After several months of wrestling with the question, the Bureau of the Budget has just given the commission the "go-ahead" for gathering and issuing the statistics on the industry for 1960. Questionnaires will go out to producers as usual early next year. Results of the 1959 survey are just now being issued.

There has been a question in Washington as to which agency should gather the statistics—the Tariff Commission or the Bureau of Census—since early this year. Tariff Commissioner John E. Talbot raised the issue when he began laying out the commission's fiscal year budget calling for a legal justification for each of the commission's various activities.

Nowhere in the tariff law could he find any specific authority for the collection of statistics on synthetic organic chemicals. The only reference that could be found was a request found in President Wilson's musty files that the commission gather information on the chemical industry to assist in the framing of government policy so as to encourage establishment of the industry in this country.

As a consequence, there has been increasing talk that this activity might be transferred to the Bureau of Census, which has the legal authority for gathering industry statistics and already issues monthly reports on inorganic chemical production, stocks and shipments. The chemical industry strongly opposed any such change, however, and made its views known to the Budget Bureau.

In authorizing the Tariff Commission to continue this work, the Budget Bureau passed over the question of the legal authority because this is something for the Tariff Commission's lawyers to mull over and not for the Budget Bureau to decide.

Officials feel, however, that even if there is no specific mention in the law for gathering these figures, there is sufficient general authority on the statute books for the commission to continue this activity.

OPD'S BOOKSHELF

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This book, called RUNNERLESS MOLDING*, presents in concise form the theory, design, application and economics of runnerless molding. It describes the technique of injection molding accomplished without the removal of a sprue and runner system on each injection molding shot.

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*RUNNERLESS MOLDING. By Ernest P. Moslo. Cloth. 162 pages. New York. Reinhold Publishing Corporation. $4.95.

Fats and Oils Up to the Minute

The second edition of FATS AND OILS* revises and brings up to date the chemistry and technology of fats and oils. It includes the latest information on chemical structure, methods of processing, and use of both animal and vegetable oils and fats.

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As a time-saving reference the book will be valuable to chemists and just about anyone connected with the production, consumption or use of oils and fats.

*FATS AND OILS, SECOND EDITION. By H. C. Kirschenbauer. Cloth. 240 pages. 6x9 inches. New York. Reinhold Publishing Corporation. $7.

Heavy Chemicals

Two moves for political power featured the market last week, both concerned with nonferrous metals. In the Congo, despite Premier Lumumba's mumblings, copper appeared just as available as ever from Katanga. Result: an easier world market. In Cuba, shaggy Fidel Castro was presented with a $75-million birthday present: the US industry-owned smelter at Moa Bay capable of putting out nickel-cobalt concentrates yielding 50 million pounds of nickel and 4.4 million pounds of cobalt annually. Rumor has it that Poland is capable of handling the ore concentrate, which had been originally intended for a US refinery at Port Nickel, La.

A US producer of phosphoric acid will increase its plant capacity to 400,000 tons per year, highlighting a drive to triple consumption of fertilizers during the next quarter-century.

Right now, things are still relatively slow in the acid market, and producers who had earlier predicted a pickup within a few weeks are now speaking of a sixty-to-ninety-day period.

Fertilizer demand, the backbone of nitric, sulfuric and phosphoric acid business, is dormant everywhere except in two-crop areas such as the south and far west.

Business for a great number of chemicals continues spotty owing to consumer vacation shutdown periods. This is perfectly all right for customers with batch operations like soapers, it's pointed out, but it's tough on the chemical industry, which produces on a continuous basis.

High purity silicon was reduced in price last week by a producer, who cited increased production economies and plant expansion as reasons. Not mentioned was stiff foreign competition in some electronic areas.

The American Paper and Pulp Association reported production for the week ended August 13 at 90.8 percent of theoretical capacity, as compared with the revised figure of 88.7 percent for the previous week and 96.4 percent for the corresponding week of last year.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Aug. 21, 1959
106.81	106.81	106.86	107.13

For Current Prices see Page 9

Acids

Hydrochloric—Good inquiry for use in petroleum refining and chemical manufacture more than made up for lack of interest in the metals industry last week. This accounted for moderate increases in sales volume.

Hydrofluoric—Market continues active, considering the season. Stainless steel operations are picking up after a slump of several weeks' duration. Demand for use in the glass industry is steady.

Petroleum alkylation requirements have accounted for slightly higher amounts over the recent period. Manufacture of HF-based fluorinated hydrocarbons continues at a spritely pace.

Nitric—About 80-85 percent of all nitric manufactured goes into fertilizer and needless to say, business has just about petered out in this area.

However, industrial demand has shown some quickening over the past few weeks, with gradually increased production of stainless steel and chemicals.

Phosphoric—A producer will double its wet-process phosphoric acid plant in Brewster, Fla., to an annual capacity of 400,000 tons 54 percent acid.

President of the company making the expansion notes that fertilizer use has tripled in the last fifteen years. Further, he expects demand to double or triple again within the next quarter-century.

Sulfuric—Market sagged in just about every quarter last week, owing to stumbling rates of operation in steel, rayon and fertilizer industries.

The cellophane business and oil refining have been among the few active participants for large volumes, and salesmen report nothing to crow about here, either.

Earlier optimism concerning market recovery within the next few weeks has abated. Now, the feeling is that demand won't show a sharp upswing for the next sixty days at least.

Steel production last week squeaked up to an estimated 1,589,000 tons (55.8 percent of capacity) from the previous week's actual 1,525,000 tons (53.5 percent of capacity) according to American Iron & Steel Institute.

Bases and Salts

Caustic Soda—Business is spotty, owing largely to still-continuing plant shutdowns among consumers. These include such large quantity users as soapers, textiles, and the paper and pulp industry.

So far, some observers note, there's no escaping the fact that business is off a bit from 1959. But 1959 was a record year, after all, they emphasize.

Chlorine—Business this year has been very good so far, reversing the trend shown by the alkali industry during most of 1958 and early 1959, when caustic soda was in better demand than its electrolytic coproduct, chlorine.

Copper Sulfate—Output in June dropped to 4,692 tons from 5,296 tons in May, says the Bureau of Mines. Shipments dipped to 5,016 tons from 5,040 tons in May. Stocks dropped from 3,252 tons in May to 2,712 tons in June.

Imports rose to 45 tons of sulfate in June from 11 tons in May. Exports jumped to 3,010 tons in June from 228 tons in May. Panama was the largest customer, taking 1,050 tons. Guatemala was second with 890 tons.

Lime—Output in 1959 hit 12.5 million tons, both captive and open market. However, any comparison with previous years must be taken with a wee bit of salt.

Reason is that the bureau reports captive lime output up 125 percent over the

Inorganic Chemicals Output: June

The following figures compiled by the Bureau of Census indicate production of industrially important inorganic chemicals, in tons:

	June	May
Aluminum chloride, anhyd	2,096	2,178
liq., cryst.	2,553	2,339
Aluminum sulfate, coml. iron-free	76,357	74,661
	4,410	4,585
Calcium carbide	92,422	100,457
Carbon dioxide, liq., gas.	44,202	40,650
solid	51,499	43,914
Chlorine gas	377,053	395,407
liquid	191,202	198,496
Hydrochloric acid	81,936	90,021
Hydrofluoric acid	10,569	10,398
Hydrogen peroxide	2,474	2,353
Nitric acid	234,603	265,080
Phosphoric acid	171,230	189,947
Phosphorus; elemental	33,000	36,353
Phosphorus oxychloride	1,971	2,146
Phosphorus trichloride	1,997	2,129
Potash, caustic, liq.	9,813	*10,236
solid	2,000	1,952
Soda ash, syn., light	184,888	199,457
syn. dense	167,961	172,986
natural	(NA)	71,036
Soda, caustic, liquid	402,923	422,522
dry	37,922	38,545
Sodium bichromate and chromate	10,864	11,214
Sodium chlorate	7,133	7,521
Sodium hydrosulfite	2,288	2,180
Sodium metal	9,357	9,779
Sodium phosphate, tribasic	4,746	4,375
Meta	5,381	5,174
Tetra	6,788	7,181
Acid pyro	1,190	1,396
Sodium silicate	34,627	46,274
Sodium sulfate, anhyd.	22,526	25,917
Glaubers salt	(NA)	*8,480
Salt cake, crude	(NA)	*62,777
Sulfuric acid, gross	1,495,438	*1,614,152

* Revised.
(NA) Not available.

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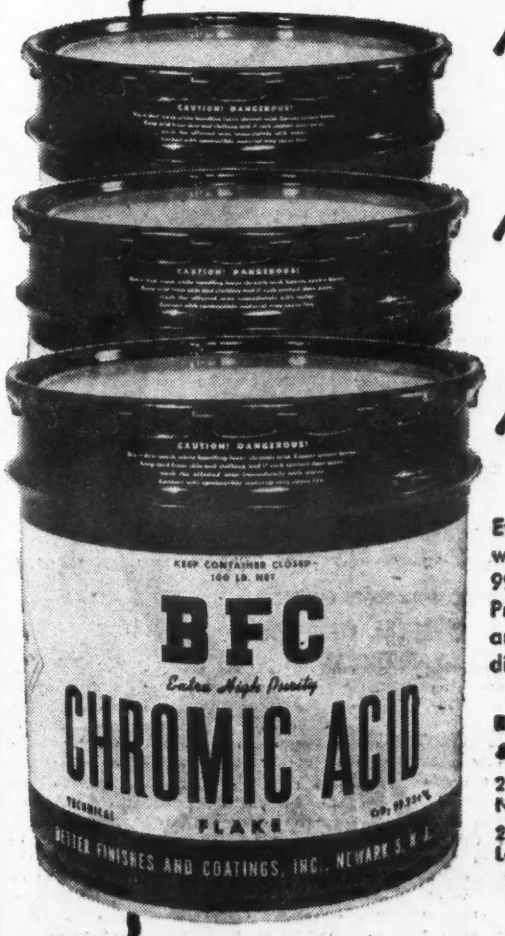

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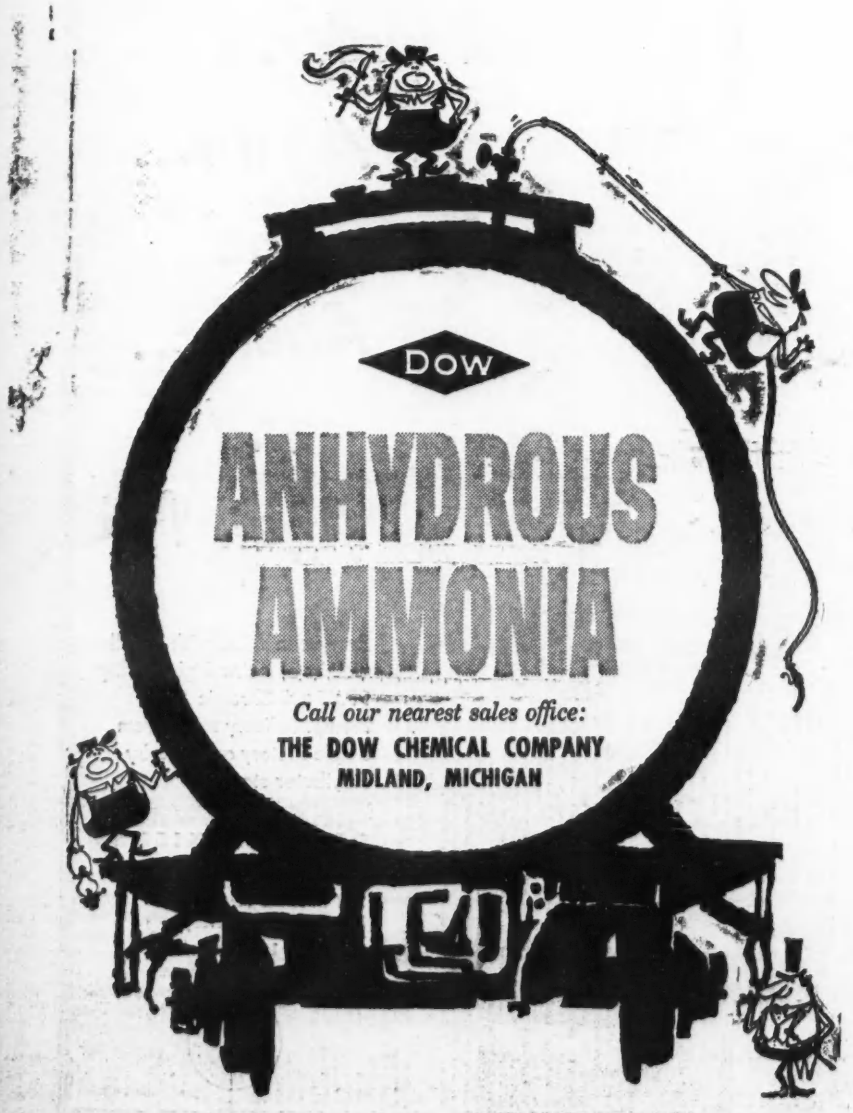

Heavy Chemicals

previous year "primarily because of more complete coverage of lime production for use in manufacturing alkalies."

How dramatic this increased coverage of the alkali industry lime consumption can be shown by the following: Total consumption of lime for alkalies increased from 742,194 tons in 1958 to 2,693,735 tons in 1959.

Hence, while the bureau claims record production of lime (18 percent more than in the previous record year of 1956) there is some question in the minds of many in the trade as to whether more lime was produced in 1956 in actuality—since "increased coverage" of lime used by the alkali industry was not in existence then.

Taken in itself, however, 1959 is considered by all a banner year in the lime business. The persistent downtrend of the last fifty years in the number of lime plants was reversed as operating lime plants rose to 156 in 1959—a gain of ten plants from the previous year.

In 1959, some 7,756,000 tons of quicklime were produced; 2,766,000 tons of hydrated lime; and 1,986,000 tons of deadburnt dolomite for a total of 12,508,000 tons.

Sodium Sulfate—Good demand exists for all grades. While no shortages exist, supply and demand are in close balance in the east and southeast.

Nonferrous Metals

Copper—Easing of the Congo situation plus light demand here made for a slackening of general interest in copper. Primary producers' metal continued at 33 cents per pound, Connecticut valley basis.

Congo-Katanga muddle continued last week, but somewhat easier. Concern about supplies of copper from Katanga (9 percent of the world's total) lessened as United National troops under Secretary-General Dag Hammarskjold began to move into the seceded province to take over from Belgian troops.

Chief reason for Congolese Premier Patrice Lumumba's insistence on incorporating Katanga into the infant Congo Republic: two copper refineries, one at Jadotville-Shitaru (capacity 145,000 metric tons per year) and the other at Luilu, near Kolwezi (100,000 metric tons per annum).

Looming on the horizon is possible labor trouble at Northern Rhodesian and Chilean copper mines. Northern Rhodesian capacity is rated in excess of 400,000 short tons a year; Chilean, not available (one mine is rated at 180,000 tons per year.

Nickel—In celebration of Cuban Premier Fidel Castro's thirty-fourth birthday, an American nickel company at Moa Bay was "intervened" by the Cuban government, thus presenting the hirsute dictator with a $75-million plum.

The plant is designed to mine Cuban nickel and cobalt. It had employed 2,000 workers until the American management decided to pull out when Castro imposed a 25 percent duty on mineral exports.

Silicon—A producer of high-purity electronic grade silicon has hacked prices for its wares from 6 percent to 28 percent. One grade was lopped from $1.55 to $1.39 per gram.

The producer gave a 50 percent increase in production capacity and reduced production costs as the reason for price cuts. Market sources point out that stiff competition from overseas might also be a factor.

Tin—Straits metal lost some of its earlier strength and was quoted on Friday at $1.02 per pound, spot.

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Caustic-Chlorine Expansions Cue in Future

—Continued from page 5

dustry for many years. Electrolytic cell production of both chlorine and caustic has grown the same for each.

Hence, since the demand wasn't there for caustic, output from caustification of soda ash dropped rapidly on a world average, in order to avoid a glut of material.

In the US, for instance, lime-soda caustic output accounted for more than 20 percent of all production in 1950. By 1959 this had shrunk to less than 7 percent.

In other parts of the world, where electric power isn't so handy, the lime-soda process is still of considerable importance. But here too, significant declines in the lime-soda portion of total output can be noted.

In countries outside the US, lime-soda caustic output was 67.8 percent of the total production in 1950. But in 1959, caustification's share had declined to 51.2 percent.

Caustic World Picture

Total world picture: Electrolytic process caustic's share of the total market rose from 50.3 percent in 1950 to 67 percent in 1959.

Of total world growth of about 3.4 million metric tons of NaOH in these years, 90 percent has been electrolytic. Growth of caustification facilities (419,000 tons) is almost entirely attributable to iron curtain countries.

The US share of world output of electrolytic caustic declined from 60.2 percent in 1950 to 57.2 percent in 1959. Our share of lime-soda caustic declined from 15.3 percent to 8.6 percent in the same period.

The growth rate of electrolytic caustic on a world-wide basis during the past ten years is almost identical with that of chlorine. Electrolytic caustic has climbed 128.3 percent; chlorine, 130 percent. The difference in the two figures is in derivation of chlorine from other processes.

The US is far and away the world leader in caustic soda and chlorine. In caustic output, the US led the way last year with 41 percent of the total.

European Common Market countries made 16 percent; Soviet Union and European satellites, 13 percent; Asia (including Red China) 11 percent, European Free Trade Association countries, 11 percent; others, 8 percent.

The caustic-chlorine situation behind the iron curtain is not comparable to that of the free world. For one thing, the old lime-soda process is still top dog, and in Russia and eastern European satellites electrolysis accounts for less than 50 percent of caustic output.

East European Caustic Lag

This has had a retarding effect in caustic development in eastern Europe and, in fact, caustic growth rate has lagged badly behind that of the west—only 3.3 percent a year since 1955.

Soda ash fares better even than caustic in terms of growth rate, averaging 3.6 percent a year in Russia and European iron curtain countries.

Of Communist output in 1959 (1.4 million metric tons), the Soviet Union produced 47.6 percent, compared with 50.5 percent in 1958. Second place was held by East Germany (22 percent).

In Asia, Japan holds its leadership. In 1959, it put out 740,000 metric tons, while Red China managed to produce some 300,000 metric tons—up 35 percent from 1958. India has doubled its output.

Since caustic and chlorine both come out of the same pot, producers will continue to be faced with the problem of what to do with caustic.

Electrolytic Processes Explored

Finding new uses for NaOH has been considerably harder than turning up new developments in chlorine. A help to caustic could be the Diamond Alkali-Battelle Memorial Institute development of a process to desulfurize iron with caustic.

Then, too, Dow Chemical Company has been producing soda ash from caustic at its Freeport, Tex., alkali plant for the past few years. Engineers are working on various means of producing chlorine only in electrolytic processes.

End-uses for chlorine in the US are: organic chemicals, 55 percent; inorganics, 10 percent; pulp and paper, 15 percent; water and sewage, 5 percent, and miscellaneous, 15 percent.

Caustic's end-uses are estimated at: chemicals, 35 percent; rayon and cellulose, 20 percent; pulp and paper, 13 percent; textiles, 9 percent; soap and detergents, 7 percent; petroleum refining, 6 percent; exports, 5 percent, and miscellaneous, 5 percent.

It's not so easy to get a world picture. However, it can be seen that rayon use of caustic has retreated steadily. In the US, caustic for rayon declined from 19.1 percent of the total use in 1939 to 17.8 percent in 1959.

In West Germany, leading European producer, chemical fibers' portion of total caustic consumption shrank from 33 percent in 1953 to 24 percent in 1959.

Taking up the slack over the last twenty years has been the growing use of caustic in the manufacture of aluminum (from an estimated 165,000 tons in 1939 to more than a million tons in 1959).

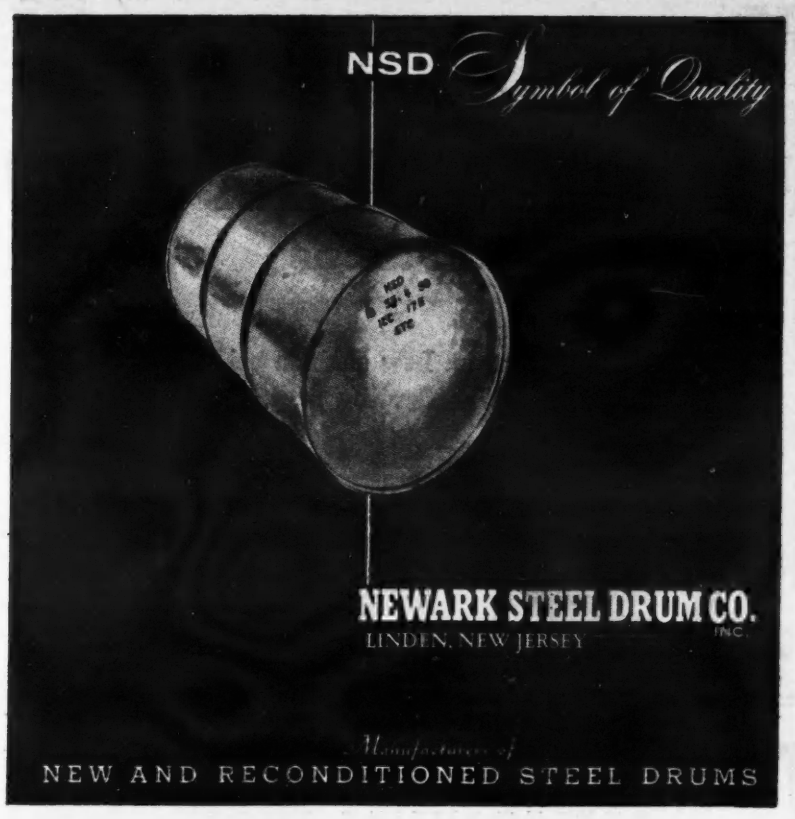
New End-Uses Not Likely

It's not likely that any significant new end-uses will be forthcoming for caustic during the foreseeable future, although chlorine will undoubtedly push onward and upward with breakthroughs in organic chlorination. (Fluorocarbon resins are a burgeoning new application, for instance.)

For caustic, hopes must be pinned chiefly on expansion of existing uses. Among the most promising: paper, cellulose, chemicals. It's hoped that gains here will more than offset losses in other areas, notably rayon.

But alkali producers are fully aware that rising caustic-chlorine output during the next several years is going to bring about some kinky marketing problems for NaOH.

This article on caustic soda and chlorine is the first of two reports on the world alkali outlook. Next week OPD will review the international soda ash situation.



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Obituaries

Du Bois Eastman

Du Bois Eastman, director of the Montebello, Calif., research laboratory of Texaco, Inc., died August 12 in Whittier, Calif. He was fifty-four years old. A leading petroleum scientist, he had been with Texaco since 1928.

Ernest V. Finch

Ernest V. Finch, one of the founders and former president of the now-defunct US Alkali Export Association, died August 17 in New York after a long illness. He was seventy-four years of age.

At the time of his death, Mr. Finch was president of Alkali, Inc., a New York chemical export firm which he organized in 1950. Mr. Finch served as president of the US Alkali Export Association from its inception in 1919 until it was disbanded in 1951. Prior to that he was a member of Herbert Hoover's War Relief Commission.

Michael Halpern

Michael Halpern, retired senior vice-president of Texaco, Inc., died in Shawnee-on-Delaware, Pa., on August 16. He was sixty-seven years old.

Dr. C. E. Kenneth Mees

Dr. C. E. Kenneth Mees, retired vice-president of Eastman Kodak Company, Rochester, N.Y., died August 15 in Honolulu, Hawaii. He was seventy-eight years old.

Harry Price

Harry Price, retired vice-president of Celanese Corporation of America, New York, died August 14 in Jupiter, Fla. He had been retired since 1953.

Anthony J. Martinelli, a chemist at the central research Laboratory of General Aniline & Film Corporation in Easton, Pa., died August 3 in New York. He was forty-two years old.

Antibiotics 1959 Leaders

—Continued from page 7

1958. Production of all tranquilizers was 1.4 million pounds in 1959—779,000 pounds more than the output in 1958.

Specific figures for the antibiotics field show that production of penicillin salts last year came to 430 trillion international units, compared to 392 trillion units in 1958. Sales in 1959 reached 371 trillion units, valued at $57.3 million. In 1958, sales were at 372 trillion units, valued at $60.3 million.

Production of dihydrostreptomycin amounted to 470,000 pounds in 1959, compared with 561,000 pounds in 1958, while sales in 1959 were 492,000 pounds, valued at $13.7 million.

Output of streytomycin in 1959 amounted to 281,000 pounds, compared with the 179,000 pounds reported for 1958.

Production of tetracycline was 307,000 pounds in 1959, compared with 287,000 pounds in 1958.

The combined output of other medicinal antibiotics, such as chlortetracycline, chloramphenicol, erythromycin, and oleandomycin, amounted to 625,000 pounds in 1959, while sales of this group were 530,000 pounds, valued at $144,000.

Production of antibiotics last year for animal feed supplements, food preservation and crop spraying, which totaled 1.4 million pounds, was substantially larger than the 903,000 pounds reported for 1958.

Glutaraldehyde Prices Cut 6 Cents Across the Board

Union Carbide Chemicals Company has cut the price of glutaraldehyde 6 cents a pound across the board. New prices: 13 cents a pound, tankcars; 15 cents a pound, truckloads of drums; and 15¾ cents a pound in less-truckload amounts.

Cause for the reduction, according to the Union Carbide Corporation division, is establishment of commercial development of a glutaraldehyde process. The price cut is said to make this material the most economical dialdehyde available.

Kawecki Chemical Expands

Kawecki Chemical Company, Boyertown, Pa., has started construction on a new laboratory and pilot plant building which will double the size of its research facilities.

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Agricultural Chemicals

With activity in most areas of the agricultural chemicals market at routine levels, marketing men are looking foreward to autumn's return to full operation. The outlook for the remainder of the year promises to be favorable, with some agricultural economists predicting firmer prices than appeared probable last Fall. Banking on the future are the phosphate producers, who are plunking down more than $33 million for expansion programs. The programs are designed to meet the rising demand for phosphates used in fertilizers. Particularly triple superphosphate, which has been reported to have been moving well in the Mid-West.

The programs are taking place at the producers' facilities near the mines in Florida. This is being done partially because it is cheaper to ship the concentrated triple superphosphate than it is to ship the unrefined rock phosphate.

Phosphate rock sold or used in the US last year set a new record, according to reports from the Bureau of Mines. Mine production increased six percent while sales and use gained by nine percent. Consumption was estimated at more than 13 million pounds, or eight percent above that for 1958.

Imports in 1959 climbed 29 percent shipped 83 percent of all imported material to the US. Exports of material over the previous year as Curacao from the US was estimated by the Bureau of Mines at 13 percent above 1958.

Reports from research chemists of Texas A&M indicate that a sterilization program will be undertaken against the boll weevil. Encouraged by the success in sterilizing male blow flies, the scientists are planning a similar campaign against this leading enemy of the southern cotton farmers. Sterile males would cause the female to lay infertile eggs thus reducing the size of successive weevil generations. Should the program prove successful, the sponsors anticipate savings of millions of dollars annually.

Ammonia—The Census Bureau reports that production of synthetic anhydrous ammonia in June amounted to 407,907 short tons compared to the 434,043 short tons produced during the previous month. Output during June, 1959, was 386,755 short tons. Stocks on hand at producing plants was reported by the Bureau at 68,537 short tons, a reduction from the 88,576 short tons on hand at the end of May.

Ammonium Nitrate — Census reports that the output of ammonium nitrate in June dropped from that reported for the previous month. During June, production of ammonium nitrate (100 percent basis) was 208,670 short tons as against the 243,550 short tons produced during May. Stocks on hand at producing plants at the end of June totaled 52,818 short tons, a reduction from the 65,666 short tons on hand at the end of May.

Fertilizer grade ammonium nitrate production followed closely the overall totals. Production during May was 219,387 short tons, and 185,816 short tons in June. The stock situation improved over the same two month period. Material on hand at producing plants at the end of June was estimated at 38,275 short tons. At the end of May 53,814 short tons were on hand.

Ammonium Phosphates—The Census Bureau reports that stocks on hand at the beginning of June totaled 17,152 short tons. Production for the month was set at 22,101 short tons. Production for the previous month and for June of last year was reported to be at about the same levels, ranging around 22,000 to 19,000 short tons. The big difference is noted in regard to the level of stocks. Stocks on hand at beginning of May were 18,017 short tons.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Aug. 21, 1959
109.97	109.97	109.97	111.14

For Current Prices see page 9

For June of last year stocks on hand amounted to 9,580 short tons or almost half that reported for May and June of this year. Shipments during June were estimated at 15,572 short tons or about 3,000 short tons greater than shipments made during June, 1959.

Ammonium Sulfate—According to reports furnished by the Bureau of Census, stocks of synthetic ammonium sulfate decreased during June, while stocks of byproduct ammonium sulfate increased. Production for both types of material decreased in June.

Production of synthetic material in June was 52,195 short tons with stocks amounting to 87,615 short tons. For June of last year, 81,811 short tons were produced. May saw 65,078 short tons produced with stocks at 113,150 short tons.

Production of byproduct ammonium sulfate during June was 49,645 short tons, while stocks on hand at producing plants were estimated at 108,121 short tons. For June of last year, production was placed at 69,955 short tons.

Nitrogen Solutions—Production of nitrogen solutions (including combination with urea) went from 102,916 short tons in May to 60,629 short tons in June. For June of last year, 52,757 short tons were produced. Stocks on hand at producing plants at the end of June were estimated at 21,649 short tons as against 26,081 short tons for the previous month.

Superphosphates—Production of normal and enriched superphosphates totaled 99,701 short tons as against the 133,039 short tons turned out in the previous month. For June 1959 production was reported at 96,149 short tons.

Stocks of normal and enriched material on hand at the beginning of June were reported by the Bureau of Census at 139,523 short tons, a drop from the 148,366 short tons on hand at the beginning of May but still than the 96,149 short tons on hand at the beginning of June of last year.

Shipments of normal and enriched superphosphates during June were almost half that for the previous month. June's shipments were 30,059 short tons, compared to the 74,858 short tons shipped in May. For the months of June, 1959, the total was 25,380 short tons.

Production of concentrated superphosphates during June amounted to 86,470 short tons, about 1,000 short tons less than the previous month but about 20,000 short tons more than June of last year. Stocks on hand, however, also scored gains in the same period. Last June, stocks of concentrated superphosphates on hand were tabbed at 68,685 short tons. For May of this year, stocks were estimated at 64,143 short tons, while stocks on hand at the end of June were reported by Census at 94,774 short tons.

Shipments of concentrated material amounted to 53,719 short tons, as against 75,893 short tons the previous month and 37,022 short tons for June of last year.

Superphosphate & Other Phosphatic Fertilizer Production

Following are data compiled by the Bureau of Census indicating superphosphates and other phosphatic fertilizer produced and shipped in the United States, July, 1959, through June, 1960. Included are percentage changes. All material is 100 percent P_2O_5 in short tons.

	1960 Season In Short Tons 100 Percent P_2O_5		1960 Season Percentage Change, from 1959	
	Production	Shipments	Production	Shipments
Normal and enriched	1,372,494	681,252	+ 8	+ 4
Concentrated	941,890	887,205	+11	+ 3
Other phosphatic fertilizers	363,744	341,063	+25	+21
Total	2,678,128	1,909,520	+ 8	+ 4

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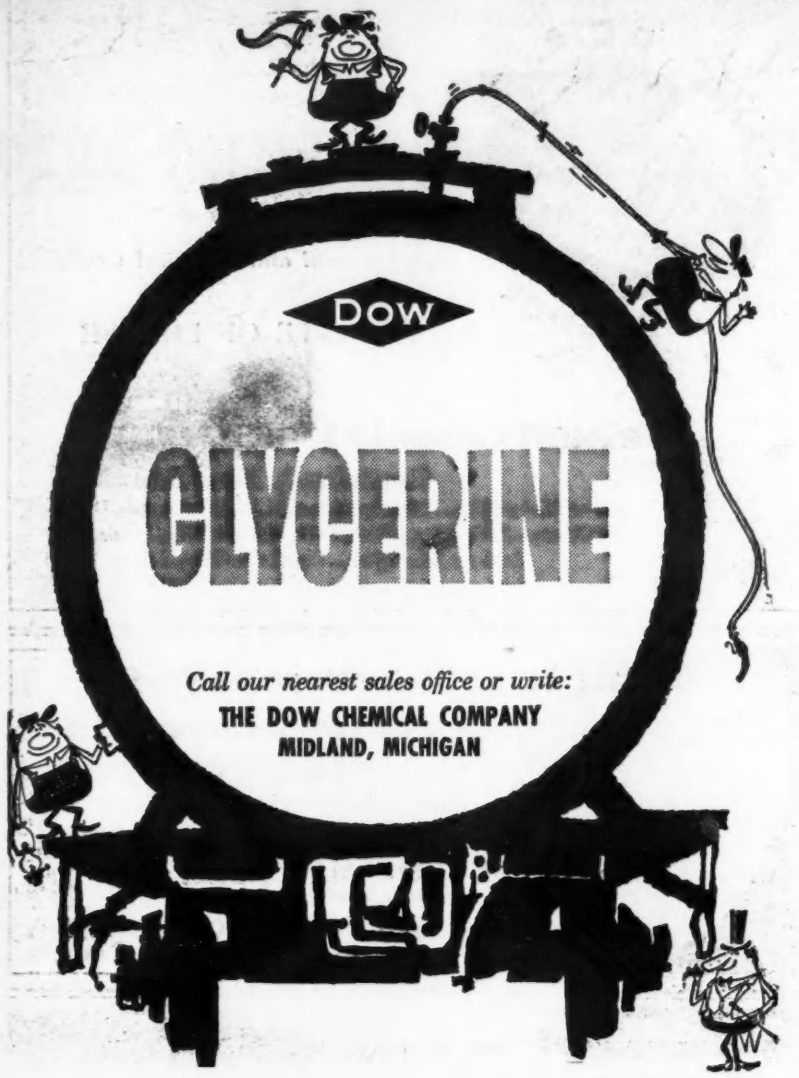

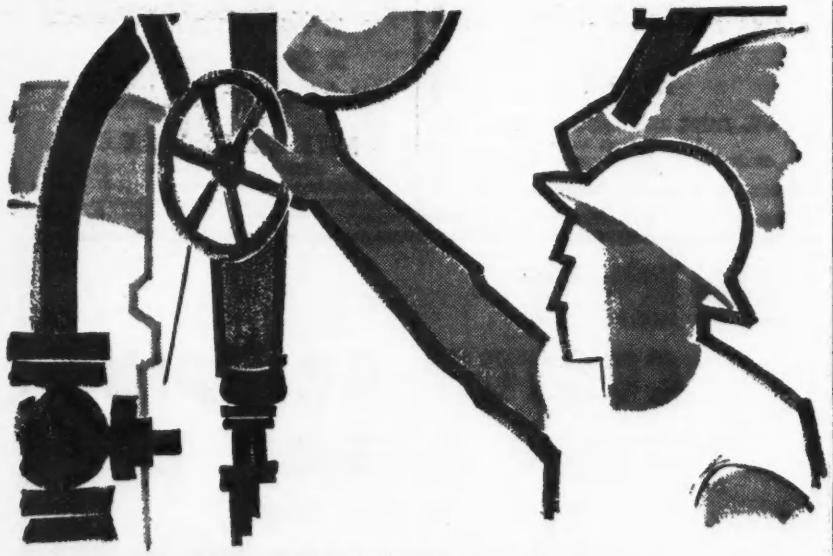

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Aliphatic Organics

Pentaerythritol production, which idled along at 53.2 million pounds in 1958, shot up, missile-like, to 63.7 million pounds in 1959, surpassing the 61.2-million-pound-output record set in 1955, one of industry's better years, and apparently halting a downtrend that got underway in 1956, got worse in 1957, and got deadly serious in 1958. In the three year period, according to Tariff Commision reports, output fell from 57.1 million pounds to 56.5 million, and finally, in 1958, to 53.3 million, a rather alarming figure in that it indicates the domestic industry was operating at about 50 percent of estimated capacity of 100 plus million pounds.

After viewing these statistics, one logically asks: What boosted PE output last year? Pondering this question, strangely enough, are people in- as well as outside the trade.

To some market sources, the answer is pretty pat. To others, though they arrive at the same conclusions, it's mostly conjecture and their own personal interpretation of government reports.

Anyway, three factors, which came to light in discussions with the trade last week, appear to be responsible—at least partially—for reviving PE demand in 1959:

- An increase in alkyd resins production of approximately 56 million pounds, indicating that an additional 7 million pounds of PE went to this, its major end-use.
- An increase in rosin ester production sufficient to boost PE usage another one-to-two million pounds.
- A suspected rise in exports. (This can't be proved because the Census bureau does not publish trade statistics for PE.)

Despite the fact that much of the increased output of PE can be ascribed to these factors, the possibility exists, of course, that a considerable amount of the polyol remained as inventory at the close of '59. It is also possible that stocks were built up deliberately in advance of anticipated demand from new and different quarters.

Those in the trade seemingly best able to appraise the market situation say they haven't heard of any new applications that could account either for an inventory build-up or increased output of PE last year. Nonetheless, there are suspicions that the dramatic rise in PE production is somewhat related to the real drama of the day: the race to outer space.

Some few people suggest, in fact, that PE may be a component in the solid-fuel propellants used in the Polaris and Minuteman missiles. They figure back to World War II when PE output was boosted substantially by requirements for PETN (pentaerythritol tetranitrate), then used to increase the explosive power of TNT.

Today, both the Polaris and Minuteman programs are being stepped up; test-firings, we know, are quite frequent. Consequently, demand for propellants should be great enough, it's felt, to utilize several million tons of PE in these flights to Smithereens.

Acetone—Newswise, the market has been quiet since the generally unexpected price reduction announced late last June. This dropped prices ½c. per pound, setting up a tankcar listing of 8c. a pound, and a carload listing of 10½c., on a delivered basis.

Without improving demand an iota, some in the trade say, the reduction cut the profit margin on the widely used solvent appreciably. Making matters worse, the schedule is written on a delivered basis and for small drum quantities this means much of the overall cost represents freight charges.

Currently, demand from protective coatings manufacturers is routinely good but it will take some spectacular production plans in Detroit before a big boost comes.

Acrolein—A major producer last week reduced prices for acrolein 15c. per pound across the board. Action set the schedule at 31c. a pound for tankcars, 36c. a pound for drum carloads and 36¾c. a pound for less carload quantities, on an f.o.b. works basis.

The significant reduction foreshadows the debut of a new producer, who is expected to bring on stream an estimated 30-to-40-million-pound-per-year plant within the next few weeks. Spokesman for this firm indicates that its posted prices at that time probably will be competitive.

The initiator of the price change said that the price drop was made possible by significant process improvements and reflected, as well, a desire to spur increased consumption in current end-uses and the development of new ones.

Acrolein is looked upon as a unique building block. In fact, crystal ball gazers foresee a time when the chemical will rank with ethylene oxide as a basic raw material.

Currently, its use is restricted pretty much to the manufacture of methionine. The new producer will divert much of its production to glycerine manufacture.

Corn Syrup—A major producer advanced all grades and packages of its tradenamed corn syrup 15c. per hundred pounds, effective August 15.

At the same time, it announced it was adjusting differentials, applicable to the various grades, to reflect their dry substance or solids value.

"This new method of figuring corn syrup price differentials," the firm said, "uses as the basic tankcar price a corn syrup which is a 43 degree Baume, 42 D.E. product having a solids percentage of 80.27."

This product is priced as follows: Tankcars $6.59 per hundred pounds; carloads of openhead non-returnable drums, $7.67; and carloads of openhead returnable drums $7.02, on an f.o.b. plant basis. Ex-warehouse prices, where applicable, are uniformly 15c. per hundred pounds higher. Prices for store delivery, where applicable, are uniformly 35c. per hundred pounds higher than ex-warehouse prices.

Corn syrup of 42 degree Baume is quoted 13c. lower than the 43 degree; 44 degree Baume is quoted 13c. above the 43 degree; and 45 degree Baume is quoted at 27c. above the 43 degree.

Ethyl Alcohol—Producers have boosted less-than-carload prices of USP ethyl alcohol from 5c. to 10c. a gallon. Effective the beginning of this month on spot, the advance becomes effective on contract October 1.

Revised schedules show 190 proof alcohol, tax paid, at $20.73 a gallon in lots of eighteen, 54-gallon drums; at $20.84 in smaller drum quantities.

Broken down similarly, 190 proof alcohol, tax free, is shown at 78c. and 89c. a gallon, respectively. Prices are applicable to all but deliveries in Oregon, Idaho, and Washington.

The upping of less carload prices while leaving the remainder of the schedule intact was a prevalent practice among organic chemicals producers a short time ago. Then, as now, shipping costs on small drum quantities of chemicals sold on a delivered basis often approached the cost of the materials themselves, necessitating producers to charge a premium if they were to emerge from the transaction with a semblance of profit.

Ethylene Glycol—Exports in June totaled 9,575,613 pounds, valued at $11,138,886. On the buyers roster: The Netherlands 4,704,104 pounds at $635,054; Sweden 2,336,320 pounds at $233,632; and West Germany 2,189,329 pounds at $224,406.

Lactic Acid—According to Census bureau reports, June imports of lactic acid were broken down like this:

Less than 30 percent acid: 29 pounds, valued at $111, dutied at $13. United Kingdom sole supplier.

Thirty percent but less than 55 percent

Price Trends

Advanced
Corn syrup, 43° Be., 15c. per cwt.

Reduced
Acrolein, 15c. per lb.

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Aug. 21, 1959
131.22	132.09	132.08	130.47

For Current Prices see page 9

Aliphatic Organics

acid: 53,500 pounds, valued at $6,396, dutied at $1,070. UK sole supplier.

Fifty-five percent and over acid: 8,250 pounds, valued at $2,687 and dutied at $592. Shippers were West Germany (4,410 pounds at $1,113) and The Netherlands (3,840 at $1,574).

Molasses—Production of Hawaiian cane blackstrap was 5,600,763 gallons in July, down approximately 2.1 million gallons from the previous month and 2.4 million from July, 1959. Output for the first six months of the year, at 31,048,470 gallons, is also running behind the '59 record (36,884,871 gallons). Agricultural Marketing Service reports.

Shipments of Hawaiian blackstrap to the mainland were a mere 2,728,343 gallons in July, less than one-third of the volume shipped in July last year (9,188,343 gallons). Cumulative total for the first half of '60 was 26,339,476 gallons, compared with 34,890,030 during the comparable period a year ago.

Polyvinyl Chloride — June imports of polyvinyl chloride (including vinyl chloride acetate polymer) amounted to 993,833 pounds. Valued at $160,336 and dutied at $44,863, this material came principally from: Italy 377,819 pounds; Japan 327,000; United Kingdom 128,400; Norway 100,000; Canada 30,000; France 24,000; and West Germany 6,614.

Sucrose — At the present time, there doesn't appear to be much likelihood that refiners will find it possible to reduce the price of refined white sucrose below $9.70 a hundred pounds.

The highest level in thirty-seven years, this price was established the last week of July, following Presidential action cutting the Cuban sugar quota for this year by 760,000 tons.

It's generally felt supplies will get tighter than they are now if the US doesn't move swiftly to reallocate quotas. According to reports, approximately 700,000 tons of the 10.4 million ton quota for '60 remain to be allocated.

Still another problem that confronts the sugar men is the impending expiration of the Sugar Act. The uncertainty over what will happen at the end of the year when the act expires, a trade member says, will also tend to keep prices up since no one can be sure of supply sources for next year.

It is believed that one refiner is quoting sucrose, eastern refinery, at $9.60 a hundred pounds.

Merck Has Tranquilizer To Soothe Without Stupor

Merck & Company has come up with a tranquilizer called "Striatran" which it says won't cause drowsiness when taken. One difficulty with tranquilizers has been that they often bring on a sleepy feeling. The company says "Striatran" is similar to meprobamate ("Miltown") chemically, but that only half as much is needed to produce tranquility without affecting alertness.

Monsanto Starts to Double Phenolic Germicide Capacity

Monsanto Chemical Company has begun construction of a new unit at Monsanto, Ill., which will double its manufacturing capacity for "Santophen 1," a phenolic germicide.

Monsanto reports that "Santophen 1" has more than tripled in sales during the past five years.

Plastics Mounting Attack

—Continued from page 5

ment comes one from Automatic Canteen Company, kingpin of the vending industry, which will form a plastics division and produce its own cups from styrene to replace the paper cups in vending machines —at a cost comparable to paper.

What sort of market is it? In vending machines last year nearly 2.1 billion cups were used for soft drinks, 1.9 billion cups for hot drinks (e.g. soups, coffee, hot chocolate) 240,000 container units for milk

Both Scott and Automatic Canteen are stressing the hot liquid container field: foamed polystyrene cups which insulate the hand of the consumer from hot liquids.

Scott will build its plant on the Delaware River at Eddystone, Pa., and hopes to have it running in early 1961. Canteen's new division will make a full range of plastic cups for hot and cold liquids, for ice cream and various dairy products.

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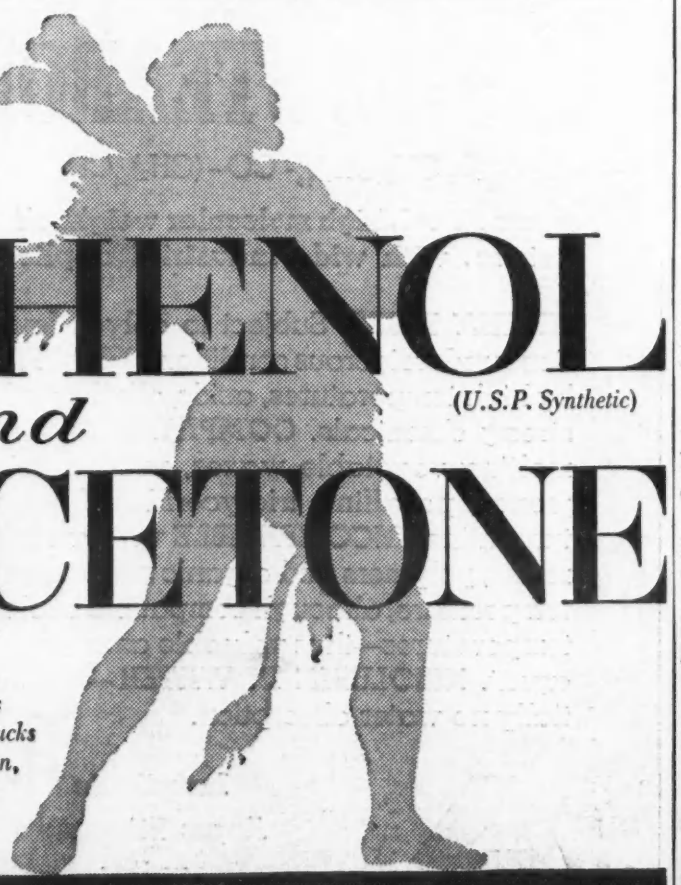

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Sodium Chloride Is Slated By FDA for GRAS Clearance

Inclusion of sodium chloride in the list of pesticide chemicals to be given GRAS ("generally recognized as safe") clearance by the Food & Drug Administration under the Miller pesticide law is being proposed by the agency on its own initiative. FDA has invited interested persons to comment on the proposal by September 17.

The general regulations under the Miller law state that as a general rule pesticide chemicals, except for certain listed substances, are not generally recognized as safe for use. The exceptions are ferrous sulfate, sulfur, lime, lime-sulfur, potassium polysulfide, sodium carbonate and sodium polysulfide.

It is proposed to add sodium chloride to this list of exceptions from the general rule.

USDA Assigns Research To Helsinki University Unit

Department of Agriculture has engaged the Institute of Agricultural and Forest Zoology of the University of Helsinki, Finland, to do research on forest insects for possible benefit in the US forest conservation program.

The department announces that it has made a grant to the institute of so-called counterpart funds under public law 480 for research to discover what substances in forest trees make them attractive to insect pests.

The research will extend over a four-year period at a cost of $49,466.

Drug Makers, Note!

—Continued from page 3

manufacturers of steroid hormones, tranquilizers and oral anti-diabetic drugs.

The hearings will begin at 10 a.m. in room 318 of the old senate office building. A witness list follows:

September 7—Dr. Wilbur G. Malcolm, president of American Cyanamid Company, New York.

September 8—Rear Adm. William L. Knickerbocker, SC, USN, executive director of the Military Medical Supply Agency, Brooklyn, N.Y.

September 9—Frederic N. Schwartz, president of Bristol-Myers Company, New York, and chairman of the Bristol Laboratories, Inc., Syracuse, N.Y.

September 12—Dr. Maxwell Finland, associate professor of medicine, Harvard Medical School, Cambridge, Mass., and Harry J. Loynd, president of Parke, Davis & Co., Detroit, Mich.

September 13—Eli Lilly, chairman of Eli Lilly & Co., Indianapolis, Ind.

September 14—Prof. Harry Dowling, head of the department of medicine, University of Illinois, Chicago.

Enjay Chemical Division

—Continued from page 5

cals. That division will handle alcohols, ketones and related products.

E. W. Bowerman, former assistant head of research and development for the Humble Division, has been named product manager of the new chemical raw material division on a rotational assignment. That unit will handle ethylene, butadiene and similar chemical raw materials.

Fertilizer Plants in India

—Continued from page 4

tion of 32,500 tons of nitrogens and 50,000 tons of ammonium sulfate for Assam.

The government ils mulling over the possibility of adding the Rourkela and Neyveli plants to the merged companies. These units, slated to go stream in 1962 and 1963, would bring present and planned potential to 467,500 tons of nitrogen and 40,000 tons of phosphorous.

This amounts to approximately 50 percent of India's Third Plan target of 1 million tons of nitrogen fertilizer annually.

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OPD Reports From Europe

US Chemical $ Pouring Into France

—*Continued from page 3*

include Oronite Chemical Company (a subsidiary of Standard Oil Company of California), in the petrochemical field, and E. I. duPont de Nemours & Co, which has contracted with a French concern for the production of weed killers. Schenectady Varnish Company is reported to be setting up a varnish facility in France.

Oronite is associated with the Ste. Antar in its petrochemical venture. Antar has a refinery at Donges and it is believed to be planning to expand its output of aromatic petrochemicals from 60,000 tons in 1960 to 75,000 tons in 1962. The company claims to have the only "Udex" unit for production of aromatics in Europe.

Paraxylene and Orthoxylene

A new Antar installation will start production of paraxylene this year, with an initial capacity reported at 10,000 tons. And another facility is planned to produce orthoxylene, with a capacity estimated at 15,000 tons a year.

Production of carbon black in France is a highly competitive American enterprise. Godfrey Cabot, Inc., and Phillips Petroleum Company jointly with Continental Oil Company are already in production. Continental Carbon Company and United Carbon Company are also understood to be building carbon black plants in France.

The French Esso subsidiary of Standard Oil Company (New Jersey) is an active petrochemical producer in France and is a participant in several joint-venture polyolefin projects with French companies.

A recent petroleum industry estimate forecasts that French output of petrochemicals will rise from 260,000 tons of carbon content to 542,000 tons of basic products in 1962—with an estimated 480,000 tons of derivative chemical products.

Current statistics for US investments in Europe are difficult to piece together and most firms have not disclosed their total investment or individual plant investments.

DuPont has revealed that its current program in Europe represents an investment of about $40 million to $50 million (OPD, 8/1/60). This includes a 50-million-pound a year neoprene plant in Northern Ireland, a 12-15-million-pound-a-year acrylic fiber plant in Holland, the French weed killer project, a paint plant in Belgium and a titanium pigments joint venture in Germany.

Holland's Chemical Share in 1957

Despite the large lead of Western Germany and France in total US investments, complete statistics in 1957 showed Holland at that time with largest share proportionately to its national income.

American investments of $213 million in Holland represented 2.9 percent of the country's national income of $7.4 billion. Belgium was second on this basis, with US investments of $158 million representing 1.9 percent of $8.3 billion national income. American investments in Italy in 1957 were $233 million, 1.1 percent of a national income of $19.8 billion.

Loss of its Indonesian colonies and their ability to earn foreign currencies after World War II caused Holland to adopt a policy of actively attracting foreign investments. There is some speculation in European financial circles that recent events in the Congo may bring about a somewhat similar situation in Belgium.

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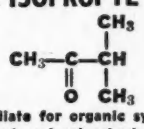

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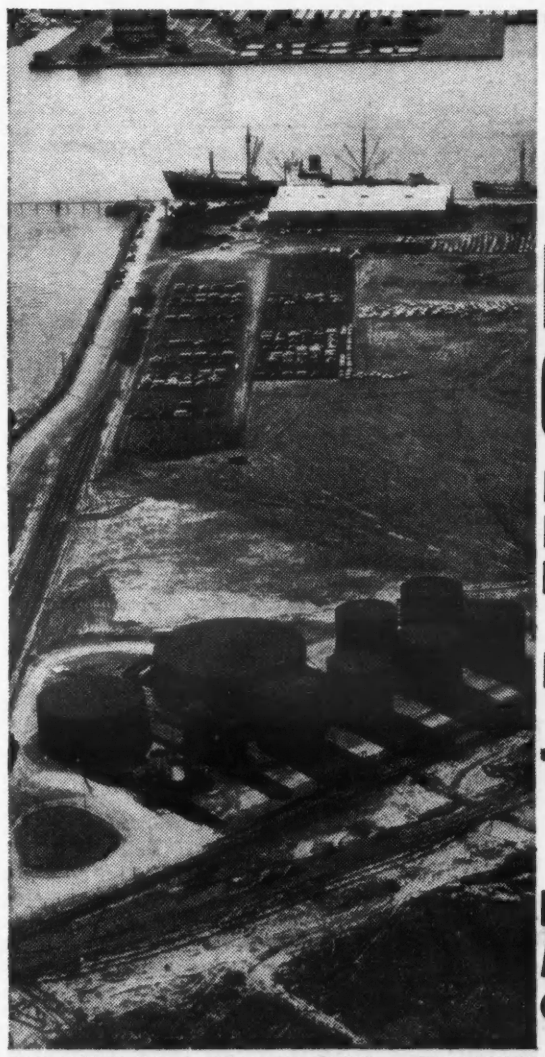

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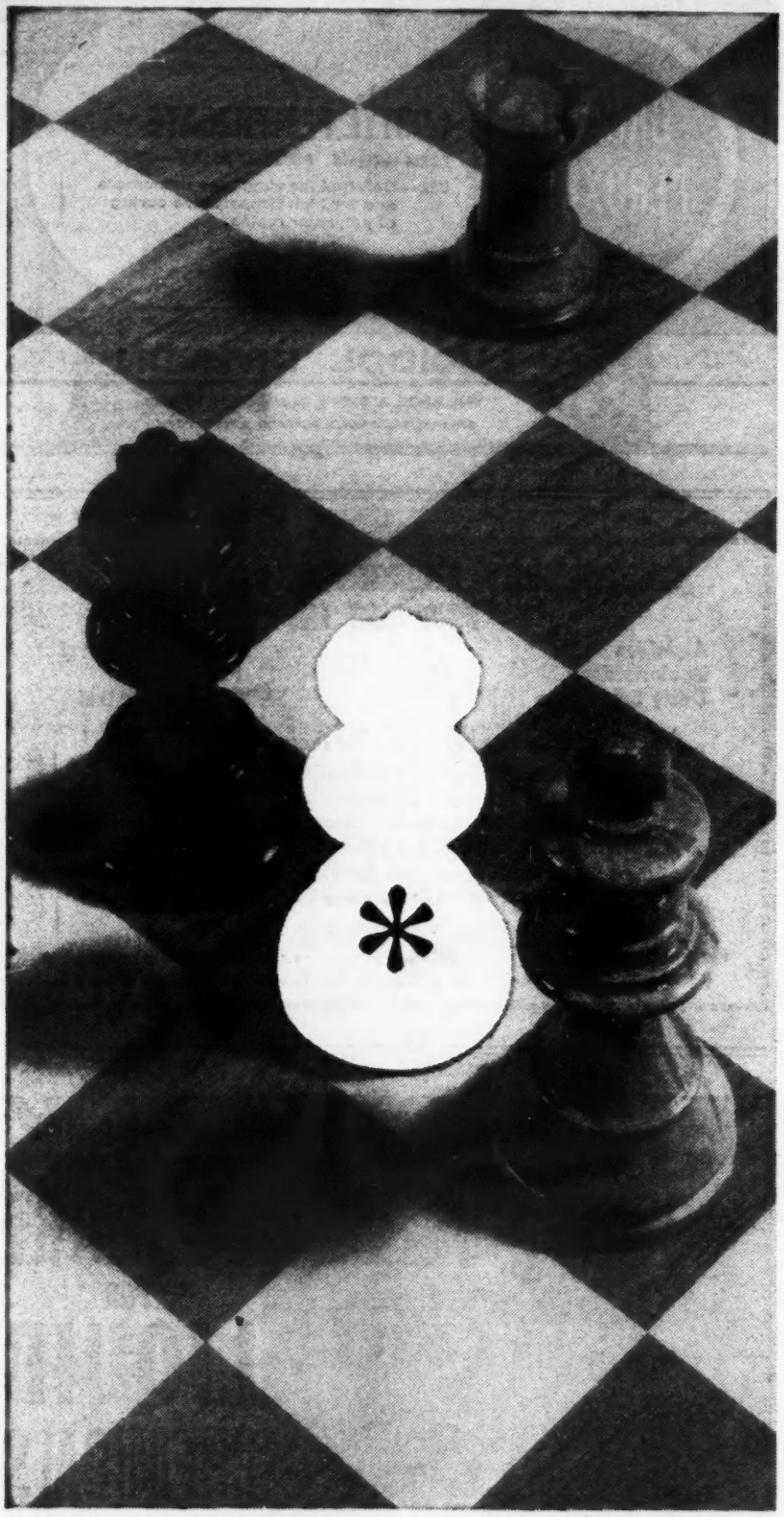

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KOPPERS COAL CHEMICALS

Coal Chemicals

A major producer has completed a 20 million pound expansion in maleic anhydride, capacity which brings the company's potential to an estimated 60 million pounds annually. Although producers have been able gradually to ship increased amounts of maleic, the market remains undersupplied. Some customers, who would normally use maleic, are reported to have switched to fumaric acid in recent months. However, supply of fumaric is also limited. The growth of polyester resins, accounting for approximately 30 percent of current maleic anhydride consumption, has been an important factor in the round of expansions announced over the past year and a half. These resins go into reinforced plastics for boats, trailer and truck bodies and materials for the construction industry.

Benzene producers are watching with interest the approaching debut of the first "Hydeal" plant at Silsbee, Texas. The unit, slated to come on stream next week, will have capacity for 4.5 million gallons of benzene. A number of other producers are reported to have "Hydeal" plants in the design stage.

Most trade sources report that overall chemical sales thus far in the year are slightly ahead of last year, although certain areas have been hurt. Styrene monomer and polymer prices have been held down by competitive pressures, while raw material (benzene) cost has gone up. Resistance to phthalate plasticizer price increases has been strong, although naphthalene, and subsequently phthalic anhydride, prices have moved upward. All of which means a tighter sueeze on profit margins for chemical makers.

American Iron and Steel Institute reported that steelmaking furnaces poured 6,343,000 net tons of ingots and steel for castings in July as against 7,404,873 tons in the previous month and 5,232,176 tons in July of last year. During the first seven months of the year, steel production was 67,097,095 net tons as compared with 69,510,379 tons in the like period last year. Based on capacity rating of 148,570,970 net tons of raw steel annually, steelmaking facilities were utilized at an average rate of 50.3 percent in July, 1960, against 60.6 percent of capacity during June. Average for the first seven months was 77.4 percent of capacity.

The Institute estimated steel production for the week ended August 21 would amount to 55.8 percent of theoretical capacity equivalent to 1,589,000 net tons of steel. Output in the week previous was 1,525,000 tons, 1,550,000 in the comparable week one month ago and 321,000 net tons in the corresponding week one year ago.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Aug. 21, 1959
118.28	118.28	118.40	118.45

For Current Prices See Page 9

Basic Products

Benzene—Supply remains tight with little hope of relief until cokeoven operations begin to pick up. Despite the tight market situation which has been in effect for almost a year, many sources maintain that current in-place capacity is sufficient to care for requirements and that price increases will, in the long run, only serve to bring in more petroleum benzene with subsequent oversupply.

Chemical men are watching with interest the approaching debut of the first "Hydeal" plant at Silsbee, Texas. The unit is slated to come in next week with capacity for production of 4.5 million gallons of benzene. A number of other producers have "Hydeal" plants in the design stage, it is reported.

Cresylic Acid—Sales of natural tar acids have recovered somewhat from the slump of earlier in the year. However, these markets have not come back with a "bang" and veteran observers point out that a clearer picture of what kind of a year it will be for cresols and cresylic acids will probably not emerge until sometime after Labor Day.

Phenol demand has held up reasonably well. Combined output of natural and synthetic phenol during the first five months of the year was 329.5 million pounds, up 61.5 million over the comparable period of last year.

Naphthalene—Coking operations in the low fifties and imports lagging far behind previous years spell out a story of continued naphthalene shortage for phthalic anhydride manufacturers.

Some relief is anticipated by an upturn in steel rate this fall, but steel men are not overly confident at this point. Orders for "heavy" steel have remained slow.

Petroleum capacity for naphthalene is now building, but production from this source is months away.

Tariff Commission reports production of crude naphthalene in the first five months of the year amounted to 237.8 million pounds, an increase of 49 million over the comparable period of time last year. Phthalic anhydride output in the five-month period was 163 million pounds, an increase of 7.4 million pounds over last year.

a-Picoline — Most producers raised price 5c. per pound on August 1, bringing the tankcar quote up to 43c. per pound. One producer, quoting 41½c. per pound in tankcars, has not changed price, but indicates that the market situation is under study. Material remains in tight supply.

Xylene—Much work remains to be done with o-xylene in order to make phthalic anhydride yields from the material comparable with those from naphthalene. However, chemical interests in Japan and Italy are going in heavily for o-xylene and domestic sources have also had to use larger amounts due to the shortage of naphthalene.

Consequently, sources estimate that expansions planned for the next two years could push capacity to better than 70 million gallons by the end of 1962.

Production of xylene is sharply higher thus far this year. Tariff Commission reported output from tar distillers, cokeoven operators and petroleum processors amounted to 123.6 million gallons through

Aromatics Foreign Trade: June

Following statistics are compiled from Census bureau reports. Units used by the bureau are retained in all cases. Attention is called to the fact that exports of toluene are reported in pounds.

	June 1960	*June* 1959	*First Six Months* 1960	*First Six Months* 1959
EXPORTS				
Benzene ..... gals.	1,533,044	143,249	11,231,826	4,045,734
Coaltar, crude and refined..... gals.	83,728	26,705	255,630	131,350
Creosote or dead oil..... gals.	120	45,341	24,497	139,539
Cresols and cresylic acids..... lbs.	730,194	913,083	5,024,034	4,356,859
Phenol ..... lbs.	4,311,512	1,135,126	19,247,033	19,410,729
Phthalic anhydride..... lbs.	2,043,271	294,400	9,908,337	3,743,600
Pitch ..... short tons	2,630	1,753	16,669	17,370
Toluene ..... lbs.	7,510,423	5,906,928	27,623,145	21,900,348
IMPORTS				
Benzene ..... gals.	9,730,801	5,414,351	20,894,214	23,068,903
Creosote and dead oil..... gals.	342,288	894,034	17,348,732	19,518,749
Cresols and cresylic acid, ADF..... gals.	272,524	225,726	692,073	1,123,958
Naphthalene, melting point less and 79° C. lbs.	3,650,425	6,754,339	21,221,674	33,776,043

Coal Chemicals

May, a gain of 35.1 million gallons over the five-month period of last year.

Intermediates

Fumaric Acid—The continued shortage of maleic anhydride has caused some consumers to turn to fumaric acid during recent months. However, trade feeling is that this is a temporary condition which will be reversed as soon as buyers who would normally use maleic find it becoming readily available once more. This development may not be too far in the future as a number of firms have expansions of existing facilities underway or new plants being built.

Maleic Anhydride—Supply has improved somewhat in this market. Most producers have been able to ship increased quantities, although the supply-demand picture is still far from balanced.

A major producer announced completion of a 20 million pound expansion which brings the company's potential up to 60 million pounds a year. Estimated current production of maleic in the US is 85 million pounds, a 63 percent increase over the 52 million pounds turned out last year. A breakdown of end-uses indicates that polyester resins account for about 30 percent of the market with alkyd and vinyl-based surface coatings accounting for an additional 30 percent. Polyester resins are reported to have had an annual growth rate of 15 percent in recent years.

A producer who came on stream with a 20 million pound maleic plant early this year, reports that the converter portion of the plant has been working at optimum levels in turning benzene into maleic acid. Some mechanical difficulties have been reported in the dehydrating unit where the acid is converted to anhydride.

Phthalic Anhydride—Sources see this market as remaining tight through the first quarter of next year. Consumers have been working from short inventories and producers are still under pressure to supply the market.

Spot lots of phthalic are offered at above market levels, but few takers are reported. Supply of naphthalene has not loosened appreciably from the situation during the strike. However, trade observers report that pressure from consumers, although still noticeable, is not what it was several months back. A possible explanation lies in the general apathy of business during the July-August vacation period. A more reliable estimate of the true business climate will be possible after Labor Day, it is said.

Styrene Monomer—Cost-price squeeze has become more noticeable in this market as price has been held down by competitive influences, while cost of raw material has continued to move upward. Most sources feel this is a temporary condition that will be alleviated when the benzene supply comes into balance once more. In the meantime, however, producers will probably have to absorb the increased benzene cost without much hope of raising styrene prices.

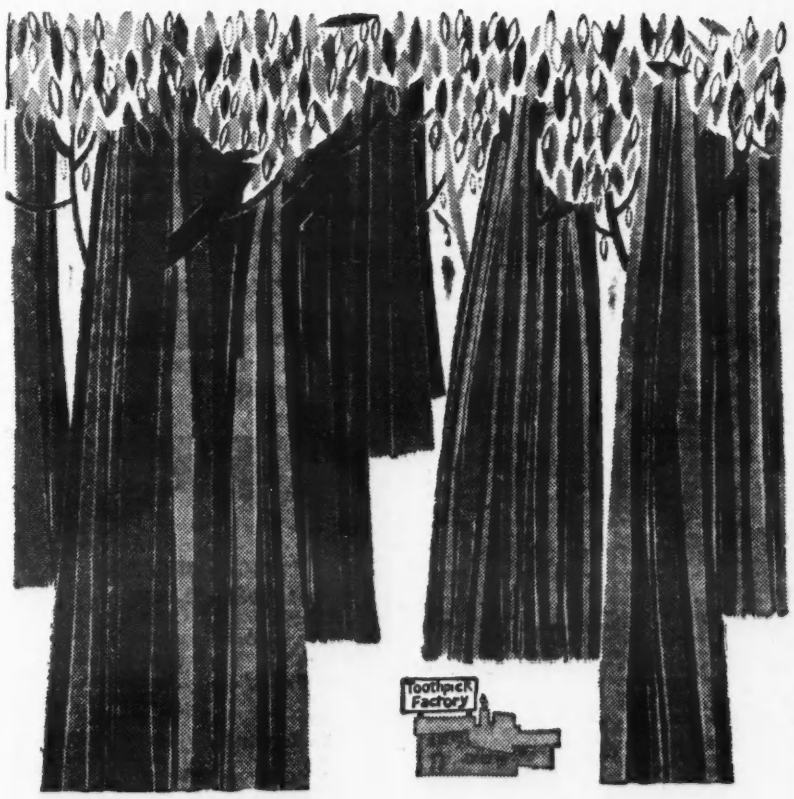
A major producer announced earlier in the year that the price of technical material used by rubbermakers would go to 11.2c. per pound in tankcars, effective July 1 of next year. Chemical sources have long felt that a price of 12c. or below is necessary to keep rubber companies from putting up styrene plants. Although demand in the plastics outlet has continued to grow beyond expectation, the market place is sharply competitive.

Perhaps most influential of all in keeping the styrene price down has been the increasing interest shown during the past two years by petrochemical producers. A number of new construction plans have been reported from this source in recent months. However, by scheduling substantial additions of their own, established producers have served notice that they do not intend to be elbowed out of the market.

Coal Chemicals

Estimated output of coal chemicals recovered from cokeoven operations during the week ended August 21, were as follows:

Ammonia liquor	lbs.	503,143
Ammonium sulfate	lbs.	21,160,019
Benzene	gals.	2,040,530
Coaltar	gals.	11,153,035
Crude chemical oil	gals.	326,112
Solvent naphtha	gals.	65,222
Toluene	gals.	456,557
Xylene	gals.	130,444



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See page 138 — 1960 Chemical Materials Catalog
See page 66 1960 Buyers Guide Issue

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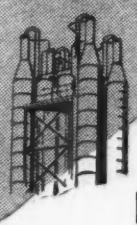

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FDA Time Extensions Given to March 6

—Continued from page 7

tables to enhance fruit set, prevent fruit drop and stimulate growth.

Following are the 800 flavors granted a grace period:

Acetal (acetaldehyde diethylacetal), acetanisole (p-acetyl anisole, p-methoxy acetophenone), acetol acetate (1-acetoxy-2-propanone, hydroxy acetone acetate), acetophenone (phenyl methyl ketone), acetyl N-butyl (hexan-2,3-dione), acetyl isobutyryl (4-methyl-penant-2,3-dione), acetyl iso-eugenol (iso-eugenol acetate, 3- methoxy-4-acetoxypropenyl-1-benzene) acetylnonyrl (undecan-2,3-dione), acetyl propionyl (pentane-2,3-dione), acetyltributyl citrate, acetylvaleryl (heptan-2,3-dione) acetylvanillin, adipic acid, allyl anthranilate, allyl butyrate, allyl caproate (2-propenyl hexanoate, allyl hexanoate), allyl capyrlate, allyl cinnamate, allyl cyclohexy acetate, allyl cyclohexyl butyrate, allyl cyclohexyl caproate, allyl cyclohexyl propionate and allyl cyclohexyl valerate.

Allyl-2-ethyl butyrate, allyl furoate, allyl heptylate (allyl heptoate, allyl oenanthate, allyl heptanoate), allyl hexadienoate (allyl sorbate), allyl ionone, allyl mercaptan, allyl nonate (allyl pelargonate, allyl nonylate, allyl nonanoate), allyl phenoxyacetate, annyl phenylacetate, allyl propionate, allyl iso-thiccyanate (mustard oil) allyl tiglate, allyl undecylate, allyl iso-valerate, ambrettoldie (hexadecen-6-olide), ammonium iso-valerate (ammonium valerianate), iso-amyl acetate (amyl acetate, b-methyl butyl acetate), n-amyl alcohol (1-penpanol), iso-amyl alcohol, iso-amyl benzoate, iso-amyl benzyl ether, n-amyl butyrate, iso-amyl butyrate, n-amyl caproate, iso-amyl caproate, n-amyl capyrlate (n-amyl octoate), iso-amyl caprylate (iso-amyl-octoate), iso-amyl cinnamate, amyl cinnamic aldehyde (a-n-amyl-b- phenylacrolein), a-amyl cinnamic aldehyde (dimethyl acetal and a-n-amyl cinnamyl acetate.

a-Amyl cinnamyl alcohol, a-amyl cinnamyl formate, a-amyl cinnamyl iso-valerate, amyl p-cresyl ether (amyl p-cresol), iso-amyl ether, n-amyl formate, iso-amyl formate, a-iso-amyl furfurylacetate, a-iso-amyl furfurylacrylate, a-iso-amyl furfurylpropionate, amyl furoate, amyl heptoate (amyl oenanthate amyl heptylate), iso-amyl laurate, iso-amyl pelargonate (amyl nonylate, nonate), iso-amyl phenylacetate, iso-amyl propionate, iso-amyl pyruvate, iso-amyl salicylate (iso-amyl o-hydroxybenzoate, orchidae), iso-amyl iso-valerate, anisaldehyde (p-methoxybenzaldehyde, aubepine liquid), anisole (methylphenyl ether, methoxybenzene), anisyl acetate (p-methoxoybenzyl acetate), anisyl alcohol (p-methoxybenzyl alcohol, anisic alcohol), anisyl N-butyrate, anisyl formate and anisyl propionate.

Benzaldehyde dimethyl acetal, benzaldehyde propylene glycol acetal, benzal glyceryl acetal, benzilidene methyl acetone (3-methyl-4-phenylbut-3-en-2-one), benzodihydropyrone (dihydrocoumarin), benzoin, benzophenone (dipheyl ketone, benzoyl-benzene), benzyl acetate (benzyl ethanoate), benzyl acetoacetate (benzyl acetyl acetate), benzylacetone (benzilidene acetone, methyl styryl ketone), benzyl alcohol (phenyl carbinol), benzyl benzoate (benzyl benzene carboxylate, benzyl phenyl formate), benzyl butyrate (benzyl butanoate), benzyl iso-butyrate (benzyl 2-methyl propaoate), benzyl cinnamate (cinnamein, benzyl b-phenylacrylate) and benzyl dipropyl ketone (morellone).

Benzylethyl alcohol, benzylethyl ether, benzyl iso-eugenol (iso-eugenol benzyl ether, 1-benzyloxy-2-methoxy-4-propenylbenzene), benzyl formate (benzyl methanoate), benzyl mercaptan, benzyl methoxyethyl acetal, benzyl methyl tiglate, benzyl phenylacetate, benzyl propionate (benzyl propanoate), benzylpropyl acetate (dimethyl benzyl carbinyl acetate), benzyl salicylate (benzyl o-hydroxybenzoate), benzyl iso-valerate (benzyl valerianate), borneol (bornyl alcohol, 2-hydroxy-camphane, borneocamphor), iso-borneol, iso-bornyl acetate, bornyl iso-valerate, n-butanol, iso-butanol, butter acids, butter esters, n-butyl acetate, iso-butyl acetate, n-butyl acetoacetate, iso-butyl acetoacetate, n-butyl anthranilate, iso-butyl anthranilate, iso-butyl benzoate, iso-butyl benzyl carbinol and butyl benzyl ether.

n-Butyl butyrate, iso-butyl butyrate, iso-butyl iso-butyrate, n-butyl iso-butyrate, butyl butyrl lactate, n-butyl caproate, iso-butyl caproate, n-butyl cinnamate, iso-butyl cinnamate, b-(n-butyl) cinnamica aldehyde, n-butyl decylenate, n-butyl formate, iso-butyl formate, iso-butyl furyl propionate, butyl heptylate (butyl oenanthate), butyl p-hydroxybenzoate (butyl parasept), n-butyl lactate, n-butyl laurate, n-butyl levulinate, p-tert-buyl methyl phenylacetate, butyl oleate, n-butyl phenylacetate, iso-butyl phenylacetate, n-butyl propionate, iso-butyl propionate, 6-iso-butyl quinoline, tert-butyl quinoline, iso-butyl salicylate, butyl stearate, n-butyl stearate, butyl undecylenate, butyl valerate, n-butyl iso-valerate, n-butyraldehyde (butanal), iso-butyraldehyde (2-methyl propanal), iso-butyric acid (2-methyl propanoic acid) and butyroin.

Camphene (3,3-dimethyl-2-methyleneorcamphane), caryophyllene, carvacrol (2-hydroxy-p-cymene, 2-methyl-5-isophopylphenol, 2-p-cymenol, cymophenol), carveol, carvomenthol (hexahydrocarvacrol, tetrahydrocarveol), carvyl acetate, carvyl propionate, cedryl acetate, cinnamaldehyde ethyleneglycol acetal (cinncloval), cinnamic acid), cinnamyl acetate (3-phenyl-2-propenyl acetate, styrylacetate, g-phenyl-allyl acetate), cinnamyl alcohol (cinnamic alcohol, styryl carbinol, 3-phenylpropen-2-o1-1) and cinnamyl anthranilate.

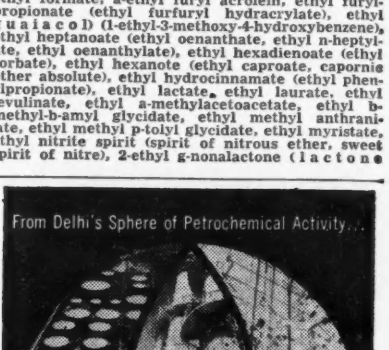
Cinnamyl butyrate, cinnamyl iso-butyrate, cinnamyl cinnamate (styracin, phenallyl cinnamate), cinnamyl formate, cinnamyl phenylacetate, cinnamyl propionate (g-phenlallyl propionate, 3-phenyl-2-propenyl-propanoate), cinnamyl iso-valerate (cinnamyl valerianate), citraconic acid (cis-methyl butene dioic acid, methyl maleic acid), citral diethyl acetal, citral dimethyl acetal, citronellal (2,6-dimethyl-octen-2-al-8, rhodinol), d-citronellol 2,6-dimethyl-octene-1-o1-8), l-citronellol (2,6-dimethyl-octene-2-o1-8), citronellyl acetate (2,6-dimethyl-octen-(1 or 2)-o1-8-acetate), citronellyl butyrate (2,6-dimethyl-octen-(1 or 2)-o1-8-butyrate), citronellyl iso-butyrate, citronellyl formate (2,6-dimethyl-octen-(1 or 2)-o1-8-methanoate), citronellyl oxyacetaldehyde, citronellyl phenylacetate, citronellyl propionate, citronellyl valerate, p-cresol, o-cresyl acetate (o-tolyl acetate), p-cresyl acetate, p-cresyl isobutyrate, m-cresyl phenylacetate, p-cresyl phenylacetate, m-cresyl phenyl ether, p-cresyl salicylate, cuminal (p-isopropyl benzaldehyde, cuminic aldehyde), cuminic alcohol (cumin alcohol), cuminyl acetaldehyde, cyclamen aldehyde (methyl p-isopropyl phenylpropyl aldehyde, p-isopropyl a-methyl hydrocinnamic aldehyde, cyclamal), iso-cyclocitral, cyclohexyl acetate, cyclohexyl acetic acid, cyclohexyl anthranilate, cyclohexyl n-butyrate, cyclohexyl cinnamate, cyclohexlethyl acetate, cyclohexyl formate, cyclohexyl methyl ether, cyclohexyl propionate, cyclohexyl iso-valerate (cyclohexyl valerianate), cyclopentanone, acetylated, cyclopentenyl methyl acetate and p-cymene (cymene, cymol).

g-Decalactone, o-decalactone, decanal dimethyl acetal, decaonoic acid (capric acid, n-decylic acid), n-decanol (n-decyl alcohol, decanol-1, decylic alcohol, alcohol C-10), n-2-decanal 1 (n-decene-2-al-1, n-1-decenaldehyde, n-1-decylenic aldehyde), n-decyl acetate (decanol acetate, acetate C-10), iso-decaldehyde (2,6-dimethyl octanal), decyl n-butyrate, n-decyl propionate, diallyl disuifide (thioaliyl ether), diacetyl monoxime (methyl iso-nitrosoethyl ketone), diallyl sulfide, dibenzyl ether, dibenzyl ketone, dibutyl butyrolactone, dibutyl sebacate (butyl sebacate), dibutyl sulfide, diethyl anthranilate, diethyl malate (ethyl malate), diethyl hydroquinone, diethyl maleate, diethyl malonate (malonic ester, ethyl malonate), diethyl sebacate and diethyl succinate (ethyl succinate).

Diglycol laurate (diethylene glycol monolaurate), dihydrocarveol (p-menth-8(9)-en-2-ol, 1-methyl-4-isopropenyl-cyclohexan-2-o1), dihydrocarveol acetate (p-menth-8(9)-en-2-o1-acetate, 1-methyl-4-isopropenyl-cyclohexan-2-o1-acetate), 1,4-dimethoxy-benzene (hydroquinone dimethyl ether), dimethyl acetophenone (2,4-dimethyl acetophenone), dimethyl anthranilate (2-methylamino methyl benzoate, N-methyl methyl anthranilate), dimethyl benzyl carbinol, 2,6-dimethyl hepten-2-al-7, dimethylhydroquinone, 2,6-dimethyl octanol-8 (geraniol tetrahydride), dimethyl phenylethyl carbinyl acetate, dimethyi resorcinol, dimethyl succinate, dimethyl sulfide (methyl sulfide), dipropyl ketone, ditetrahydrofurfuryl phthalate, d-dodecalactone, n-dodecanal (lauric aldehyde, aldehyde C-12), 2-dodecanal-1 (n-2-dodecen-1-al, n-1dodecenaldehyde, n-1dodecylenic aldehyde, n-1-dodecane-2-al-1) and n-dodecyl alcohol (dodecanol-1, lauryl alcohol, alcohol C-12).

p-Ethoxy benzaldehyde, ethyl abietate, purified, ethyl acetoacetate (acetoacetic ester), ethyl acrylate, ethyl n-amyl ketone (octanone-3), ethyl anisate, ethyl anthranilate, ethyl benzoate (ethyl benzene-carboxylate), ethyl benzoylacetate, ethyl benzyl aceoacetate, a-ethyl-g-butyl acrolein, ethyl butyl ketone (heptanone-3), ethyl n-butyl malonate, 2-ethyl butyraldehyde, ethyl iso-butyrate, ethyl-butyro lactone, ethyl capyrlate (ethyl octanoate), ethyi cinnamate (ethyl 3-phenyl propenoate), ethyl cyclohexyl glycidate, ethyl cylcohexyl propionate, ethyl decylate (ethyl caprate), ethyl iso-eugenol, ethyl formate, a-ethyl furyl acrolein, ethyl furyl-propionate (ethyl furfuryl hydracrylate), ethyl guaiacol) (1-ethyl-3-methoxy-4-hydroxybenzene), ethyl heptanoate (ethyl oenanthate, ethyl n-heptylate, ethyl oenanthylate), ethyl hexadienoate (ethyl sorbate), ethyl hexanote (ethyl caproate, capornie ether absolute), ethyl hydrocinnamate (ethyl phenylpropionate), ethyl lactate, ethyl laurate, ethyl levulinate, ethyl a-methylacetoacetate, ethyl b-methyl-b-amyl glycidate, ethyl methyl anthranilate, ethyl methyl p-tolyl glycidate, ethyl myristate, ethyl nitrite spirit (spirit of nitrous ether, sweet spirit of nitre), 2-ethyl g-nonalactone (lactone

From Delhi's Sphere of Petrochemical Activity...



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TYPICAL ANALYSIS

Sp. Gr. 15.56/15.56°C	0.871
API Gravity	31.1
Weight, Lbs/Gal	7.246
Color	30+ Saybolt
Acid Wash Color	Less than No. 1 Standard
Acidity	No free acid
Sulfur Compounds	No H_2S or SO_2 or Thiophene
K. B. No. (Toluene-105)	101
Distillation	
First Drop	138.0°C 280°F
Dry Point	141.0°C 286°F
Flash TCC	82°F

CHEMICAL DIVISION
DELHI-TAYLOR OIL CORP.
DALLAS TEXAS

On Listings of Some 800 Synthetic Flavoring Substances and Adjuncts

100230 Geneva), ethyl nonanoate (ethyl pelargonate, ethyl n-nonoate), ethyl oleate, ethyl oxyhydrate (rum ether, principal component ethyl n-butyrate (q.v.), ethyl phenylacetate, ethylphenylbutyrate, ethylphenyl glycidate and ethyl propionate.

Ethyl pyruvate, ethyl salicylate, ethyl sebacate, ethyl stearate, ethyl p-tolyl gylcidate, ethyl undecylenate, ethyl iso-valerate (ethyl b-methylbutyrate, ethyl iso-valerianate), ethyl n-valerate, ethylene glycol monobutyl ether acetate, ethylene glycol monomethyl ether, eucalyptol (cineol), iso-eugenol (4-propenylguaicol), eugenol acetate (acetyl eugenol), eugenol iso-amyl ether, eugenol benzoate, eugenol formate, iso-eugenol formate, iso-eugenol phenylacetate,

Farnesol, d-fenchone (d-1,3,3-trimethyl-2-norcamphanone), fenchyl alcohol, formic acid, furfuryl acetate, furfuryl alcohol (a-furyl carbinol), furfuryl mercaptan, furfurylidene acetone (furfural-acetone, 4 (2-furyl)-3-butene-2-one), furyl acetone, furyl acrolein, furyl ketone and fusel oil, refined (amyl alcohols).

Geranyl acetoacetate, geranyl benzoate, geranyl iso-butyrate, geranyl n-butyrate, geranyl caproate, geranyl ethylether, geranyl formate, geranyl phenylacetate, geranyl propionate, geranyl iso-valerate, glucose penta-acetate, glycol brassylate, glyoclic acid (hydroxyacetic acid), guaiacol (o-methoxyphenol), guaiacyl phenylacetate, guaiol acetate, guaiol butyrate,

g-Heptalactone, n-reptaldehyde (heptanal, n-heptyl aldehyde, oenanthaldehyde, aldehyde C-7), n-heptaldehyde-2,3-butylene glycol acetal, heptanone-2 (methyl n-amyl ketone, ketone C-7), heptyl acetate, n-heptyl alcohol (heptanol-1, alcohol C-7), heptyl n-butyrate, heptyl iso-butyrate, heptyl cinnamate (oenanthyl cinnamate), heptyl formate, heptyl octanoate (heptyl caprylate), n-hexanal (n-hexaldehyde, n-caproic aldehyde, n-hexoic aldehyde, caproaldehyde), hexanoic acid (n-caproic acid, n-hexoic acid), n-hexanol (n-hexyl alcohol), 2-hexanal (2-hexen-1-al), 2 hexenal (2-hexen-1-al), 2-hexen-1-ol, 3-hexen-1-ol, 2-hexenyl acetate, hexyl acetate, hexyl butyrate, hexyl caproate, a-hexyl cinnamic aldehyde, hexyl formate, hexyl furoate, hexyl octanoate (hexyl caprylate), hexyl propionate, hydratropic alcohol, hydratropic aldehyde dimethyl acetal, hydratropyl butyrate (a-phenylpropyl alcohol, butyric ester), hydrocinnamic acid (phenyl propionic acid), p-hydroxybenzylacetone, hydroxycitronellal, hydroxycitronellal diethyl acetal and hydroxycitronellal dimethyl acetal.

Hydroxycitronellal and methyl anthranilate (base product), hydroxycitronellol, 14-hydroxytetradecanoic acid (cyclopentadecanolide), indloe (benzopyrrole), a-ionone, b-ionone, irisone ketone (bis), a-irone (6-methyl ionone) isopropyl acetate, p-isopropyl acetophenone, isopropyl alcohol, isopropyl n-butryate, isopropyl iso-butyrate, isopropyl caproate, isopropyl cinnamate, isopropyl formate, isopropyl phenylacetate, isopropyl propionate isopropyl quinoline, isoproyl iso-valerate, lauric acid, lauryl acvetate (n-dodecyl acetate, dodecanol acetate, acetate C-12), levulinic acid (acetopropionic acid), linayl anthranilate, linayl benzoate, linayl butyrate, linayl iso-butyrate, linalyl caprylate, linalyl cinnamate, linayl formate, linayl propionate and linayl iso-valerate (linayl valerianate).

Maleic acid, malonic acid, maltol (3-hydroxy-2-methyl-4-pyrone, 3-hydroxy-2-methyi-g-pyrone, larixinic acid), 1-8-p-menthadien-7-ol (1-hydroxymethyl-4-isopropenyl-1-cyclohexene, perillyl alcohol), menthol (hexahydrothymol, 3-p-menthanol, 5-methyl-2-isopropyl-hexahydrophenol), d-neo-menthol (5-methyl-2-isobutyl-hexahydrophenol), menthone (p-menthanone), menthyl acetate, menthyl iso-valerate, methallyl butyrate, o-methoxy methyl benzoate, 2-methoxy-4-methyl phenol (4-methyl guaiacol, creosol, 2-methoxy-p-creosol, 4-hydroxy-3-methoxy-1-methylbenzene), 1-(p-methoxyphenyl)-2-propanone (anisyl methyl ketone, p-methoxy phenylacetone), 4-(p-methoxyphenyl butanone-2 (anisyl acetone), 1-(p-methoxyphenyl) penten-1-one-3 (a methyl anisylidene acetone, ethone), p-methoxytoluene (1-cresyl methyl ether, 4-methoxytoluene, methyl benzyl ether), methyl acetate, p-methyl aceophenone (methyl p-tolyl ketone, p-acetyl toluene, 1-methl-4-acetyl benzene), methyl anisate, methyl benzoate (oil of niobe), methl benzyl acetate, a-methyl benzyl acetone, p-methyl benzyl acetone, a-methyl benzyl alcohol (methyl phenylcarbinol, 1-phenylethanol), methyl iso-butyl ketone, 2-methyl butyraldehyde, methyl n-butyrate, methyl iso-butyrate, methyl cetine carbinate (methyl 2-Heptadecenoate), methyl chavicol chavical methyl ether, p-methoxyallylbenzene, p-allylanisole, estragole, esdragol), methyl cinnamate, a-methyl cinnamic aldehyde 3-methyl coumarin, 6-methyl coumarin, methyl o-cresyl methyl ether, 2-methoxytoluene), methyl p-cresyl ether and 1-methylcyclopentadione-2, 3 (methylcyclopentenolone),

1-methyl-1-cyclopentene-2-ol-3-one butylrate (2-hydroxy 3-menthyl 2-cyclopenten-1-one butyrate), 1-methyl-1-cyclopentene-2-ol-3-one isovalerate (2-hydroxy 3-methyl 2-cyclopentene-1-one isovalerate), methyl decyne carbonate (methyl 2-decynoate), methyl dihydroabietate, 6-methyl benzodihydropyrone (6-methyl dihydrocoumarin, methyl melilotine), methyl-3, 4-dimethyl-2, 3-epoxy-4-hexenoate (strawberry aldehyde derivatives), 4-methyl-7-ethoxy-benzopyrone (4-methyl-7-ethoxycoumarin), methylethyl acetaldehyde (2-menthyl butanal-1), methylethyl ketone, methyl eugenol (eugenol methyl ether, 1-2-dimethoxy-4-allylbenzene), methyl iso-eugenol, 5-methyl furfural, methyl furoate, a-methyl furyl acrolein, methyl heptenone (6-methyl-5-hepten-2-one), methyl heptine carbonate) methyl-2-heptyneoate), methyl heptylate (methyl oenanthate), methyl heptyl ketone (nonanone-2), methyl hexanoate (methyl caproate), methyl-2-hexeneoate, methyl hexyl acetaldehyde, methyl hexyl ketone, p-methyl hydrotropic aldehyde, methyl p-hydroxybenzoate, methyl a-ionone (a-cetone), methyl-o-ionone, methyl-g-ionone, methyl-o-ionone, a-methyl iso-ionone, methl laurate, methyl mercaptan, methyl-4-methyl pentanoic acid (methyl-iso caproate, methyl iso-butylacetate), 1-methyl-4(4-methyl-3-pentenyl)1,2,3,6-tetrahydrobenzaldehyde (1-methyl-4-isohexenyl-3-tetrahydrobenzaldehyde) and methyl-b-methylthiopropionate (methyl-p-methyl mercaptopropionate).

Methyl myristate, methyl-a-naphthyl ketone, methyl-b-naphthyl ketone, methyl nonyl acetaldehyde (aldehyde C-12), methyl nonyl ketone (undecanone 2), methyl nonylen-2-ate, methyl octanoate (methyl caprylate), methyl octyne carbonate (methyl 2-octynoate), methyl pelargonate, 2-methyl pentanoic acid, methyl phenylacetate (methyl-a-foluate), methyl phenyl butanone, methyl phenyl butyrate, methyl phenyl glycidate, methyl phenyl methyl glycidate, methyl phenyl propionate, meihyl propionate, methyl N-propyl ketone, p-methyl quinoline, b-methylthiopropionaldehyde (methylmercaptopropionaldehyde, methional), methyl undecylenate, methyl undecyl ketone, methyl iso-valerate, methyl vanillyl ketone, methylol methyl amyl ketone (ketone alcohol), methylol methyl hexyl ketone acetate (ketone alcohol ester), musk ambrette (2,6-dinitro-1-methyl-4-tert-bueyl-3-methoxy-benzene), musk ketone (4,6-dinitro-1,3-dimethyl-5-tert-butyl-2-acetyl benzene), musk tibetine (2,6-dinitro-3,4,5-trimethyl-1-tert- butyl benzene), musk xylol (2,4,6-trinitro-1,3-methyl-5-tert-butyl benzene) and myrcene (7-methyl-3-methylene-1,6-octadiene),

b-Naphthyl anthranilate, b-naphthyl iso butyl ether, b-naphthyl ethyl ether (nerolin, ethyl-2-naphthyl ether), b-naphthyl methyl ether (yara-yara), nerol, nerolidol, neryl acetate, neryl butyrate, neryl iso-butyrate, neryl formate, neryl propionate, neryl iso-valerate, nonanal (pelargonaldehyde, pelargonic aldehyde, aldehyde C-9), nonanediol 1,3-acetate, mixed esters (octyl crotonyl acetate, hexylene glycol diacetate, jasmonyl), n-nonoic acid (pelargonic acid, nonanoic acid), n-nonyl acetate (nonanol acetate, acetate C-9), n-nonyl alcohol (nonanol-1, alcohol C-9), g-nonyl lactone (g-n-amyl butyrolactone, aldehyde C-18), nonyl octanoate (nonyl capyrlate), n-nonyl iso-valerate, g-octalactone, octanal (capryaldehyde, acprylic aldehyde, n-octaldehyde, aldehyde C-8), octanal dimethyl acetal (dimethoxy-octane) C-8 dimethyl-acetal), octanoic acid (caprylic acid, n-octoic acid), 1-octanol (n-octanol, heptyl carbinol, pri-n-octyl alcohol, alcohol C-8), 2-octanol (n-octyl alcohol, methyl hexyl carbinol, capryl alcohol), n-octyl acetate (2-ethyl hexyl acetate, acetate C-8), n-octyl butyrate, n-octyl iso-butyrate, n-octyl caprylate, n-octyl formate, n-octyl heptylate, n-octyl phenylacetate, n-octyl propionate, n-octyl salicylate and n-octyl iso-valerate.

n-Pelargonyl morpholide, pentadecanolide (angelica lactone), iso-pentaldehyde, perillyl acetate, a-phellandrene (p-menthadiene-1,5), phenoxyacetic acid, phenoxyethyl iso-butyrate, phenylacetaldehyde, 2,3-butydene glycol acetal, phenylacetaldehyde dimethyl acetal, phenylacetic acid (a-toluic acid), phenyl dimethyl carbinyl iso-butyrate, phenylethyl acetate (b-phenylethyl acetate, benzyl carbinyl acetate), phenylethyl alcohol (b-phenylethyl alcohol, benzyl carbinol), a-phenylethyl alcohol (methyl phenyl carbinol), phenyiethyl anthranilate, phenylethyl benzoate, phenylethyl butyrate, phenylethyl iso-butyrate, phenylethyl carbinol, phenylethyl cinnamate, phenylethyl dimethyl carbinyl iso-butyrate, phenylethyl formate, b-phenylethyl furoate, phenylethyl methyl carbinol, phenylethyl methyl carbinol acetate, phenylethyl methyl ethyl carbinol, phenylethyl phenyl acecate,phenylethyl propionate, phenylethyl n-propyl acetal, phenylethyl salicylate, phenylethyl tiglate, phenylethyl isovalerate, phenyl methyl carbinol (styryl alcohol), a-phenylpropionaldehyde (hydratorpyl aldehyde, a-methyl phenyl acetaldehyde, a-methyl tolualdehyde) and b-phenylpropionaldehyde (phenyl propyl aldehyde hydrocinnamaldehyde, hydrocinnamic aldehyde, benzyltaldehyde).

Phenylpropyl acetate (hydrocinnamyl acetate), phenyl n-propyl alcohol (hydrocinnamic alcohol), 3-phenylpropyl butyrate, a-phenylpropyl butyrate, phenylpropyl iso-butyrate, phenylpropyl caproate, phenylpropyl cinnamate, phenylpropyl formate, phenylpropyl propionate, phenylpropyl iso-valerate, phenyl salicyclate, phthalide (1(3)-iso-benzofuranone, a-hydroxy-o-toluic acid lactone), a-pinene, b-pinene, piperine, 8-piperitone (1-p-menthen-3-one, 1-methyl-4-isopropyl-1-cyclohexene-3-one), piperonyl acetone (heliotropyl-acetate), piperonyl acetone, piperonyl iso-butyrate, polycyclic musk, propanal (propionic aldehyde), propenyl guaethol (hydroxymethyl anethole), propionaldehyde, hydrogen sulfide reaction product, n-propyl acetate, n-propyl alcohol, p-propyl anisole (dihydroanethole, propyl methoxybenzene), n-propyl benzoate, n-propyl butyrate, n-propyl iso-butyrate, n-propyl caproate, n-propyl cinnamate, n-propyl formate, propyl fuorate, propyl furylacrylate, n-propyl heptylate, n-propyl p-hydroxybenzoate, propyl mercaptan (propyl thiol), n-propyl phenylacetate, propyl propionate, n-propyl propionate, n-propyl iso-valerate, propylene glycol stearate, iso-pulegol, iso pulegol acetate, pulegone (-4-(8)-p-menthen-3-one, 1-methyl-4-isopropylidene-cyclohexane-3-one), iso-pulegone (-8(9)-p-menthen-3-one, 1-methyl-4-isopropenyl-cyclohexan-3-one), pyrazine, pyridine, pyruvic acid (pyro-racemic acid), pyruvic aldehyde (methyl glyoxal) and iso-quinoline.

Resorcinol dimethyl ether (1,3-dimethoxybenzene), rhodinyl acetate, rhodinyl butyrate, rhodinyl iso-butyrate, rhodinyl formate, rhodinyl phenylacetate, rhodinyl propionate, rhodinyl iso-valerate,

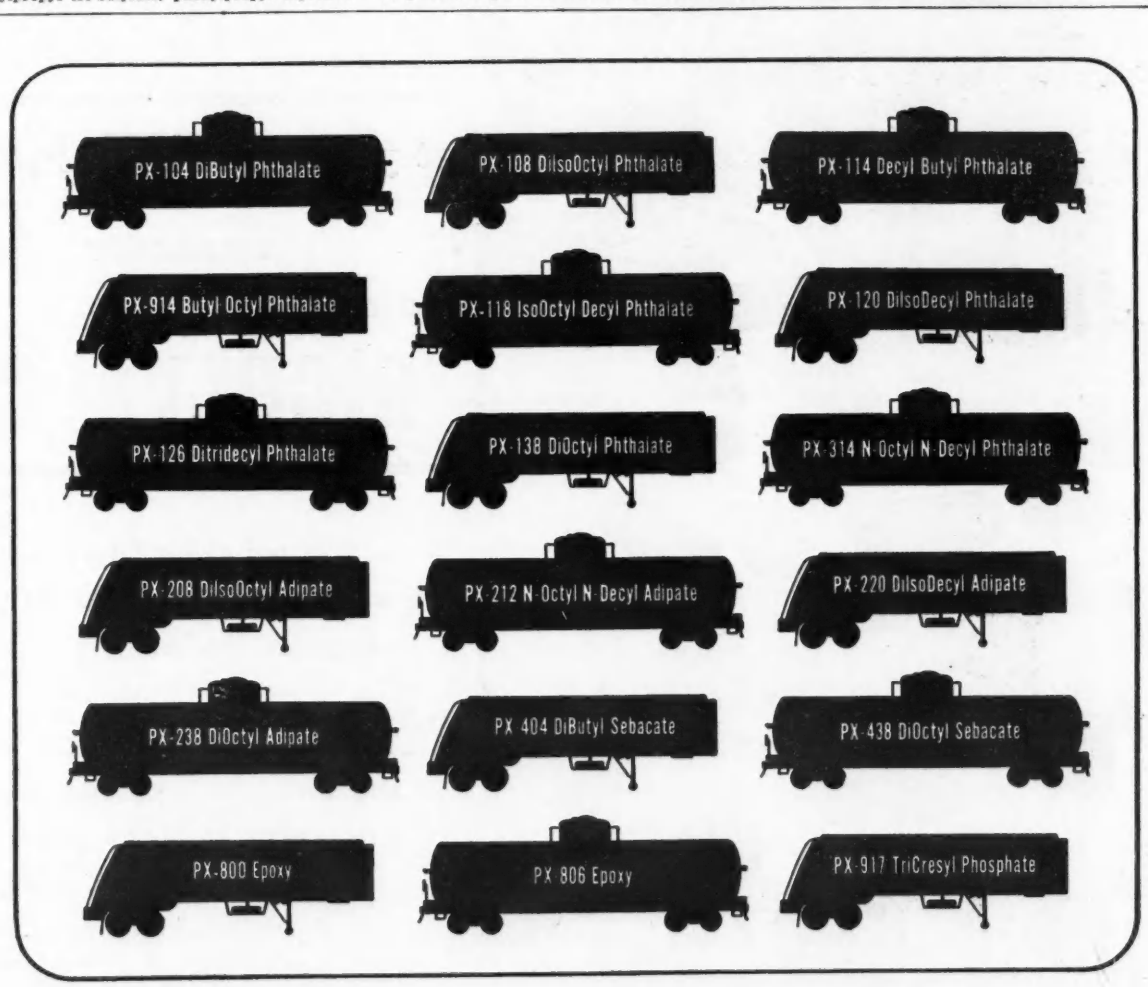
Salicylic aldehyde (o-hydroxybenzaldehyde), santalol, santalyl acetate, santalyl phenylacetate, skatole (b-methylindole, 3-methylindole), g-stearolactone, styralyl acetate (methyl phenylcarbinyl acetate), styralyl benzylic ether (methyl phenylcarbinyl benzylic ether), styralyl butyrate (methyl phenylcarbinyl butyrate), styralyl formate (methi phenlycarbinyl formate), stryalyl propionate (methyl phenylcarbinyl proprionate),

Terpine-4-ol (1-p-menthen-4-o1, 1-methyl-4-isopropyl-1-cyclohexene-4-o1, terpineneol-(4), a-terpineol (terpineol), terpinolene (1,4(8)-terpadiene), terpinyl acetate), terpinyl anthranilate, terpinyl butyrate, terpinyi iso-butyrate, terpinyl cinnamate, terpinyl formate, terpinyl propionate, terpinyl iso-valerate, tetradecanoic acid (myristic acid) and n-tetradecyl aldehyde (myristinaldehyde, tetradecanal, aldehyde C-14).

Tetrahydrofurfuryl acetate, tetrahydrofurfuryl alcohol, tetrahydrofurfuryl butyrate, tetrahydrofurfuryl propionate, tetrahydro-pseudo-ionone, tetrahydrolinalool, 1,2,3,4-tetrahydro-6-methylquinoline (tetrahydro p-toluquinoline, tetrahydro p-methylquinoline), 3,4,5,6-tetrahydropyronyl-2-methyl acetate, thienyl mercaptan, thymol, iso-thymol, tolualdehydes, mixed, o.m.p, tolualdehyde glyceryl acetal, mixed, o.m.p, tricarbaliylic acid (1.2.3-propane tricarboxylic acid), trichloromethyl phenyl carbinyl acetate, triethyl citrate (ethyl citrate), triethyl o-formate, 2,6,6-trimethyl-bicyclo-(1,1,3)-hepten-2-one-4 (verbenone), trimethyl cyclohexanol (3,3,5-trimethylcyclohexanol-1), trimethyl cyclohexanyl salicylate.

g-Undecalactone (g-undecyl lactone, g-n-heptyl butyrolactone, aldehyde C-14, peach aldehyde), undecenyl acetate (10-hendecenyl acetate, undecene-1-o-11 acetate, undecylenic acetate), n-undecyl alcohol (undecanol-1, undecylic c-11), undecylenic aldehyde (aldehyde C-11), undecylic aldehyde (undecanal).

Valeraldehyde, valeraldehyde and hydrogne sulfide, reaction product, n-valeric acid (pentanoic acid), iso-valeric acid (b-methyl butyric acid, valerianic acid, active valeric acid), iso-valeri caldehyde (2-methyl butanal-4), g-valerolactone (3-methylbutyrolactone, 3-valerolactone), valerolactone (4-valerolactone, tetrahydro-a-pyrone, tetrahydrocoumalin), iso-valerophenone (phenyl iso-butyl ketone), vanillylidene acetone, veratraldehyde (vanillin methyl ether), vetiverol (vetivenol, vetivol), vetiveryl acetate (vetivenyl acetate, vetiverol acetate, vetacetyl), vetiveryl formate, vetiveryl propionate, vetiveryl iso-valerate, p-vinyl guaiacol and zingerone (3-methoxy-4-hydroxybenzylacetone).



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Drugs, Fine Chemicals

Drug makers had it pretty good in 1959. Their production of bulk medicinals was up 4.9 percent, to 106.6 million pounds, the Tariff Commission says, while sales rose 6.8 percent, to 87.3 million pounds, valued at $585 million. This compared with 1958 output of 101.4 million pounds, and sales of 81.4 million pounds worth $555 million. In terms of value, the antibiotics, as a group, were the largest: sales of 2 million pounds produced a revenue of $3.8 million. This represented an increase of 5 percent in quantity and 4.2 percent in value over 1958.

But despite the sales gain, combined output of antibiotics for human and veterinary use dropped 13 percent, to 2.3 million pounds last year (1958 production: 2.6 million), and, while the Tariff Commission says nothing about prices, trade people will tell you that these also dropped appreciably, especially for such old work-horses as penicillin, DHS, and streptomycin. In fact, a one-time major producer of these drugs halted production midway through '59 and still has not returned to the marketplace.

Reflecting the downtrend in prices, 1959 sales of penicillin salts, amounting to 371 trillion international units, produced $57.3 million, whereas sales of 372 trillion international units in 1958 produced $60.3 million.

In 1959, as in previous years, aspirin was the medicinal turned out in largest quantity. Output, the Tariff Commission reports, was 18.1 million pounds, sales 17.1 million pounds worth $9.2 million.

Production of vitamins last year totaled 11 million pounds, up from 9.8 million in '58. Sales were 7.3 million pounds, valued at $76.6 million.

Three other major groups of medicinals for which production gains were reported by the Tariff Commission are sulfa drugs, tranquilizers, and barbiturates. Up 36.2 percent, output of sulfa drugs was 5.8 million pounds. Production of tranquilizers rose to 1.4 million pounds from 779,000 in '58, and barbiturates output, scoring a more modest gain, rose to 819,000 pounds from 790,000.

Amino Acids—The Tariff Commission reports output of amino acids in 1959 was 4,879,000 pounds, and sales 4,445,000 pounds valued at $7,123,000. Represented by these figures: b-alanine, glutamic acid hydrochloride, l-lysine hydrochlodide, and a miscellaneous group.

Output of b-alanine was 668,000 pounds. Sales were 435,000 pounds, valued at $874,000. Average price: $2.01 per pound.

Output of glutamic acid not reported, but sales were 69,000 pounds, valued at $119,000. Average price: $1.72 a pound.

Output of lysine was 273,000 pounds. Sales were 226,000, valued at $1,160,000. Average price: $5.13 a pound.

Niacinamide—Imported niacinamide is reported to be selling here at about $5.90 a kilo, but, according to reports from domestic sources of this vitamin, this price is not being met.

OPD carries a listing of $6.50 a kilo for 100 kilo lots on a delivered basis.

Imported nicotinic acid is said to be going here at $3.85 to $3.90 a kilo. This has been a highly competitive market for a long time.

The Tariff Commission reports production of niacinamide last year was 1,023,000 pounds, sales 671,000 pounds valued at $2,143,000. Average price per pound: $3.19.

Nicotinic acid output in '59, the commission says, was 2,513,000 pounds, including both animal and feed grades. Sales at the time were 1,477,000 pounds, valued at $2,690,000. Average price: $1.82.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Aug. 21, 1959
59.93	59.93	59.93	60.49

For Current Prices See Page **9**

Pyridoxine Hydrochloride—No move has been made to revise price schedules but it's reliably reported that sales are being made at $95 a kilo on a minimum order of 5-kilos, and at $100 a kilo for smaller amounts. Competition obviously is keen.

Production of pyridoxine (B_6) during 1959 was 60,000 pounds. Sales figures are not available from the Tariff Commission.

Saccharin—The trade cites the continual in-flow of foreign material as their main problem—and one they could do little about even if they wanted to. Some let-up was noted in June, however, when imports dropped to 15,018 pounds, less than half the May volume.

Shipping here in June were: Japan 13,018 pounds, valued at $18,327 and dutied at $3,868; and the Netherlands 2,000 pounds, valued at $3,029 and dutied at $634.

Silver Salts—Although silver prices have fluctuated now and again throughout the past several months, schedules for the silver salts have been maintained throughout.

For silver nitrate, prices are: 65¾c. an ounce for 10,000 to 19,000 ounces; 66¾c. an ounce for 5,000 to 9,000 ounces; and 67½c. an ounce for 1,000 to 4,000 ounces.

A relatively small volume chemical, silver proteinate is sold mostly to drug stores although there is some limited pharmaceutical usage.

A domestic maker offers the mild silver proteinate at $1.46 an ounce in 16-ounce bottles. It has discontinued the manufacture of the strong proteinate. No movement, spokesman for the firm says.

Theobromine—Although prices as low as $4 to $4.25 are reported, a leading domestic firm which offers theobromine continues to maintain a listing of $5.50 a pounds, applicable to drum lots of 100 pounds. Indications are, however, that the firm will revise its prices if the competition, not yet assessed, is particularly keen.

Theobromine and sodium acetate, USP, is currently quoted at $6.45 a pound in 500-pound lots, f.o.b. works; the sodiosalicylate at $4.70 a pound on a similar basis.

Imports of theobromine in June, all from the Netherlands, totaled 7,220 pounds, and were valued at $25,365 and dutied at $1,984. The preceding month, 11,322 pounds were brought in.

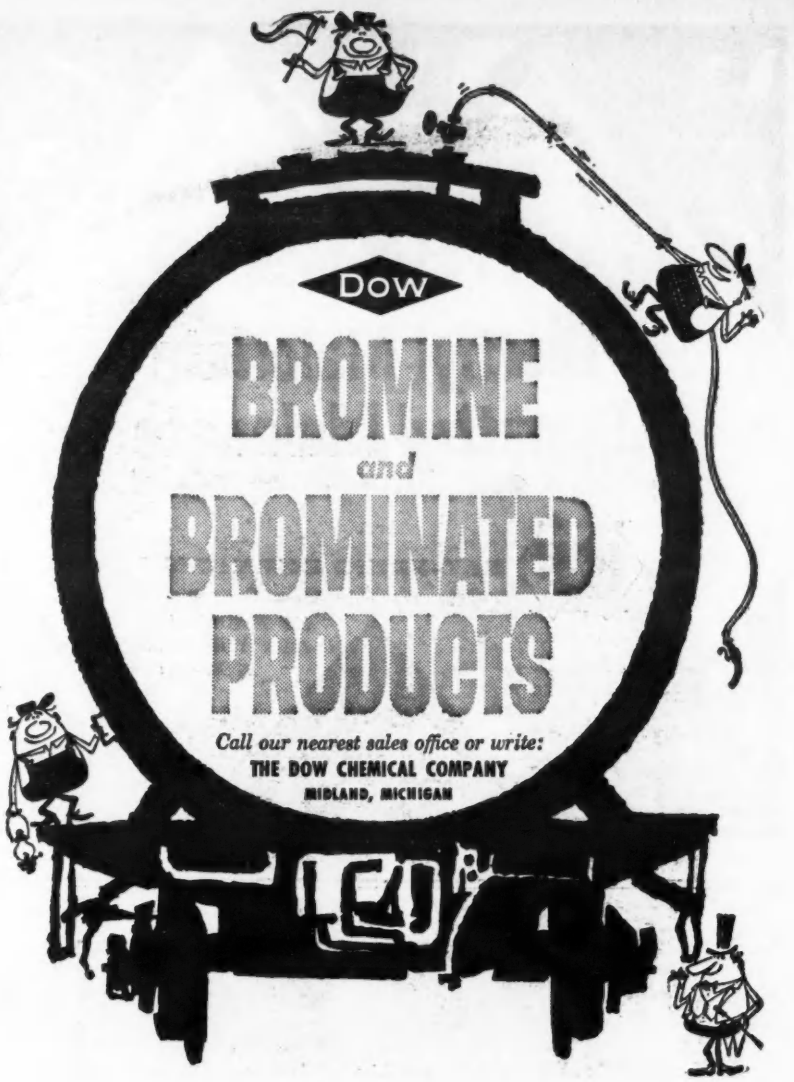
Theophylline—A domestic maker lists

Drugs and Fine Chemicals Output and Sales: 1959

Following statistics for selected fine chemicals and drugs were compiled by the Tariff Commission. Figures, in thousands of pounds or thousands of dollars, where applicable, relate to the production and sales of bulk material only.

	Production	Sales Quantity	Sales Value
Acetylsalicylic acid	18,907	17,155	$9,235
Ascorbic acid and salts	4,764	3,148	10,808
Dihydrostreptomycin	470	492	13,721
Niacin	2,513	1,477	2,690
Niacinamide	1,023	671	2,143
Folic acid	6	—	—
Penicillin salts	567	489	57,343
Phenobarbital	297	274	895
Pyrodoxine	60	—	—
Streptomycin	281	240	5,388
Sulfa drugs	5,835	—	—
Riboflavin	430	355	4,489
Tetracycline	307	257	59,429
Thiamin derivatives	245	—	—
Vitamin A (alcohol, esters)	382	336	25,935

A dash (—) indicates data not reported.



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Drugs, Fine Chemicals

theophylline at $3.65 a pound for 100-pounds. Importers, it's believed, are offering the chemical at $3.15 to $3.25 a pound depending upon quantity.

Production of theophylline base and derivatives in 1959, the Tariff Commission reports, totaled 117,000 pounds. Of this, 106,000 pounds were sold for $317,000, making the average price $2.99 a pound.

Included in the production figure are the 58,000 pounds of aminophylline produced domestically last year. No further information (sales, etc.) is available from the commission.

Much aminophylline is imported, a factor which tends to depress domestic prices.

Botanicals

Markets for water-soluble gums are reported quiet firm—tragacanth especially, as higher replacement costs have driven spot prices higher. Arabic, unchanged, is selling from 27c. to 29c. a pound depending upon quantity, although crude gum is being offered at source ¼ cent lower.

Imports detained by the Food & Drug Administration at the Port of New York during the two week period ended August 12 included 295 bags of kola nuts and 9 lots (382 packages) of papain.

Gum Tragacanth—The tragacanth market is reported very strong. Based on higher replacement costs, spot prices have risen to $4.10-$4.20 a pound for the No. 1 ribbons, $3.75-$3.80 a pound for the No. 2 ribbons, and $3.40-$3.65 a pound for the No. 3 ribbons.

Tonka Beans—Requirements for tonka beans are getting progressively smaller. This is due primarily to government restrictions on the use of coumarin, a trade source says.

Coumarin is the so-called "odoriferous principle" of tonka beans. It is now limited to use in perfumes only. Formerly, it was used to flavor baked goods, all kinds of confectionery, candies, and tobacco. It also served as an important adjunct in synthetic vanilla flavors. These markets are no more, however.

Since the extraction of coumarin is the primary reason for the tonka beans imported here, there is naturally less call for the botanical today. Prices range from $1.30 a pound for the Brazilian beans to $1.50 a pound for the Angostura, duty paid, f.o.b. New York.

Kefauver's Anti-Drug

—Continued from page 7

be told with the assurance that the audience will be keenly interested.

- "As the splendid work of the American health team becomes better understood by the general public, those wonderful drugs, the products of pharmacy, will not be thought of as just merchandise.
- "Pharmacy has come to recognize the fact that the revolution in therapeutic agents which has brought praise and prestige to the profession has also brought perplexing problems."

Proceeding with his coverage of pharmacy's current problems, President Newton then went on to discuss mail-order prescription schemes and recent legislation. He noted the vigorous activity of the APhA in efforts to stop what he called "this threat to destroy community pharmaceutical service."

Reviewing the purposes of the APhA, he directed attention to the need for "one voice that speaks for all in a way that each branch of the profession will recognize as its own voice amplified a thousand times."

A Call to Integrate, Affiliate, Federate

He directed the Association to investigate integration, affiliation, or federation "with local and state pharmaceutical associations so that their voices and their support will reach the national level quickly." He said further, "I recommend that such an arrangement be made with the pharmaceutical organizations of at least one state as soon as possible, in order that the effectiveness of the plan may be tested."

Fred Wesley, of Fritzsche Brothers, Inc., New York, urged drug manufacturers to medicate flavorings instead of flavoring medicines, arguing that the medicines would sell better and stay on the market longer.

He said that the successs or failure of pharmaceutical preparations is often closely linked to the absence or presence of medicinal taste.

Too many, he said, believe that simply adding a carefully chosen flavor can help the taste of obnoxious medicine. Too many companies ignore the taste angle until the last minute, when it is really too late to make the medicine savory, he warned.

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Chemical Five Year Gains Blueprinted for Yugoslavia

Sulfuric acid in Yugoslavia will climb 4.8 times by 1965. Plastics will jump 4.1 times their present volume. Synthetic fibers will rise by more than 60 percent. These are some of the goals of Yugoslavia's new five-year plan, according to the Federal Chamber of Foreign Trade.

Referring to a speech by President Josip Broz Tito, the chamber's magazine *Commercial Information* reports the following:

Production of synthetic fibers will rise from 22,000 metric tons now to 38,000 tons five years hence. Plastics will rise from 14,000 tons to 60,000 tons. Sulfuric acid output is supposed to jump from its present 146,000 tons to 700,000 tons annually five years hence.

In addition, President Tito expects Yugoslav production of copper to rise from the 1960 level of 35,000 tons to 77,000 tons in 1965. Aluminum output, 24,000 tons per annum now, will increase to 40,000 tons. Zinc production, now 32,000 tons, will rise to 70,000 tons.

Further, it is anticipated that fertilizer output, now 400,000 tons a year, will increase to more than 2 million tons a year in 1965.

Fertilizer Output

—Continued from page 7

1957-58 production and 37 percent above the production in 1953-54.

Consumption of 22.9 million tons in 1958-59 was 7 percent above the 1957-58 figure and 31 percent above 1953-54. International trade amounting to 6.3 million tons was a 2 percent increase over 1957-58 and 40 percent above 1953-54.

The review says that the evident excess of production capacity caused anxiety in some quarters, but "its main effect has been to promote use wherever possible." It adds that areas where population pressure is heavy, such as mainland China and India, offer the best prospects for increased consumption.

The forms in which nitrogenous fertilizers were produced in 1957-58 are shown in the following percentages of total output:

Ammonium sulfate, 29 percent; ammonium nitrate, 25 percent; sodium nitrate, 4 percent; calcium nitrate, 6 percent; calcium cyanamide, 4 percent; other forms, solids, 14 percent and solutions, 17 percent; organic materials, 1 percent.

Kelco Offers Algin Technical Data

Kelco Company of Clark, N.J., is offering free of charge a four-page technical bulletin on algin. Entitled "Emulsifying, Thickening, Suspending and Stabilizing with Algin," the publication features a table comparing the effectiveness of various algin products recommended for specific properties and a table describing algin products used in the food industry. Copies of the bulletin are available from Kelco, 75 Terminal Avenue, Clark, N.J. It is not, as previously reported, offered by Cayton, Inc.

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AGAR—40 dms, T M Duche & Sons, Bilbao
50 bgs, Casablanca
ALBUMIN—300 bgs, P A Gaynar, Rotterdam
ALGIN—10 dms, Baird Chemical Industries, Glasgow
ALUMINUM POWDER—10 dms, B F Drakenfeld, Bremen
40 dms, Crescent Bronze Powder Co, Hamburg
AMBER OIL—3 dms, Meer Corp, Puerto Cortes
6 dms, Kline & Co, Puerto Cortes
1 dm, S B Penick & Co, Puerto Cortes
AMMONIUM CARBONATE—128 dms, American Firstoline Corp, Rotterdam
28 dms, American Agricultural Chemical Co, Glasgow
AMMONIUM CHLORIDE—300 bgs, Chemical Manfacturing Co, Liverpool
ANILINE DYES—78 dms, H Bruckmann & Lorbacher, Hamburg
13 dms, Carbic Hoechst Corp, Rotterdam
10 . dms, L & R Organic Products Co, Liverpool
97 dms, Rotterdam
ANNATTO SEED—100 bgs, S American Mineral & Merchandise Corp, Cabedelo
ANTIMONY—20 cks, Watson Geach, Glasgow
50 kgs, Watson Geach, Liverpool
ASAFETIDA—9 cs, Lo Curto & Funk, Hamburg
ASBESTOS FIBER—200 bgs, Asbestos Products Corp, Lourenco Marques
3,100 bgs, Johns Manville Corp, Durban
900 bgs, N American Asbestos Corp, Durban
ASCORBIC ACID—5 dms, Copenhagen
BARIUM CARBONATE—5 dms, Mutchler Chemical Co, Hamburg
BEESWAX—92 bgs, International Commodities Corp, Valparaiso
25 bgs, Machado & Co, Ciudad Trujillo
245 blks, Lobito
120 bgs, Puerto Plata
61 bowls, Luanda
BENTONITE—1,112 bgs, Whittaker Clark & Daniels, Leghorn
200 bgs, C B Chrystal Co, Leghorn
BENZOSULFIMIDE—30 dms, Foster T Smith, Yokohama
BLANC FIXE—1,000 bgs, C J Osborn Co, Rotterdam
BOISE DE ROSE OIL—5 dms, Elton Trading Co, Callao
BONEMEAL—986 bgs, Transatlantic Animal By Products Corp, Buenos Aires
BRONZE POWDER—17 dms, B F Drakenfeld, Bremen
20 dms, Phoenix Shipping Co, Hamburg
50 dms, Crescent Bronze Powder Co, Hamburg
10 dms, Putnam Chemical Corp, Hamburg
54 dms, Hamburg
CALCIUM CARBONATE—800 bgs, Whittaker Clark & Daniels, Liverpool
600 bgs, Pluess Stafer, Antwerp
CALCIUM HYPOCHLORITE—100 dms, Yokohama
CARAWAY SEED—200 bgs, Hoger Corp, Rotterdam
200 bgs, Rotterdam
CARBON, DECOLORIZING—10 bgs, L A Salomon & Bro, Rotterdam
CARDAMOM—22 bgs, Lo Curto & Funk, Puerto Barrios
29 cs, Wm E Martin & Son, Puerto Barrios
61 cs, Wm E Martin & Son, Puerto Matias de Galvez
CARNAUBA WAX—63 bgs, M Argueso & Co, Parnahyba
125 bgs, F Henjes, Parnahyba
32 bgs, Baldini & Co, Parnahyba
38 bgs, Paul A Dunkel Parnahyba
125 bgs, Cornelius Wax Refining Corp, Parnahyba
250 bgs, Latina Trading Corp, Salvador
151 bgs, N American Cocoa Trading Co, Salvador
56 bgs, Frank B Ross, Fortlaeza
13 bgs, Smith & Nichols, Parnahyba
CASEIN—120 bgs, First Spice Co, Rotterdam
7,000 bgs, Eugenio Lang, Buenos Aires
1,000 bgs, L N White & Co, Buenos Aires
1,000 bgs, P A Dunkel, Buenos Aires
1,000 bgs, Borden Co, Buenos Aires
CASSIA—1,336 bls, K H Landes & Co, Tandjong Priok
21 bls, C M Van Sillevoldt, Rotterdam
76 bls, Ludwig Mueller, Rotterdam
601 bls, Rotterdam
CASTOR OIL—302 tons, Baker Castor Oil Co, Rotterdam
140 tons, Recife
CELERY SEED—255 bgs, George Lueders & Co, Bombay
255 bgs, Louis Furth, Bombay
262 bgs, C Czarinkow, Bombay
CHESTNUT EXTRACT—300 bgs, Barkey Importing Co, Naples
CHLORINATED RUBBER—300 bgs, C M C Chemicals Inc, Liverpool
CINNAMON BARK—99 bgs, L A Champon & Co, Mombasa
CINNAMON LEAF OIL—15 dms, L A Champon & Co, Mombasa
6 dms, Fritzsche Bros, London
CITRONELLA OIL—35 dms, George Uhe Co, Keelung
10 dms, Holland Colombo Trading Society, Keelung
6 dms, Florasynth Lab, Colombo
CLAY, BALL—2,421 bgs, United Clay Mines Corp, Avonmouth
CLAY, CHINA—1,256 bgs, Anglo American Clays Corp, Avonmouth
CLOVE—250 bgs, Zanzibar
CLOVE OIL—29 dms, Zanzibar
COCONUT OIL—387 tons, American Trust Co, Cebu
COD OIL—25 dms, E F Houghton & Co, St Johns
CODLIVER OIL—75 dms, Scandinavian Oil Co, Reykjavik
COPAL GUM—128 bgs, Geismar & Co, Manila
248 bkts, Macassar
COPPER CYANIDE—110 dms, D Hauser, Hamburg
CORIANDER SEED—1,200 bgs, Kenitra
CORN OIL—260 tons, Corn Products Co, Rotterdam
CORN STARCH—900 bgs, Impex Agricultural Co, Rijeka
400 bgs, Geismar & Co, Rotterdam
600 bgs, Antwerp
CRESYLIC ACID—120 dms, Van Oppen & Co, Avonmouth
CUBEBS—100 bgs, Fritzsche Bros, Singapore
DEGRAS—40 dms, Silvey Shipping Co, Liverpool
5 dms, Olympic Shipping Co, Liverpool
119 dms, H A Gogarty, Nagoya
DEXTRIN—330 bgs, Morningstar Paisley Inc, Rotterdam
DICALCIUM PHOSFATE—2,204 bgs, Wessel Duval & Co, Antwerp
DILL SEED—78 bgs, Levy & Levis Co, Bombay
DOGWOOD BARK—264 bgs, Lydia E Pinkham, Kingston
DYES, COALTAR—70 dms, Orlex Dyes & Chemical Corp, Hamburg
81 dms, H Bruckmann & Lorbacher, Hamburg
44 cs, Fallek Products Co, Hamburg
47 dms, Toms River Cincinnati Chemical Corp, Rotterdam
EARTH COLORS—1,030 bgs, Naftone Inc, Bremen
1,210 bgs, Naftone Inc, Rotterdam
1,400 bgs, Rotterdam
FENNEL SEED—100 bgs, Mutual Spice Co, Bombay
FENUGREEK SEED—100 bgs, S B Penick & Co, Casablanca
110 bgs, Levy & Levis Co, Casablanca
FISHLIVER OIL—5 cs, J D Smith, Yokohama
5 dms, Kanemstau N Y Inc, Yokohama
10 dms, Consumers Import Co, Yokohama
FISHMEAL—4,348 bgs, Supe
FORMIC ACID—52 dms, Rotterdam
FUEL OIL—112,713 bbls, Metropolitan Petroleum Corp, Curacao
88,906 bbls, Hess Inc, Punta Cardon
133,424 bbls, Hess Inc, Puerto La Cruz
258,776 bbls, Shell Caribbean Petroleum Corp, Curacao
307,769 bbls, Shell Caribbean Petroleum Corp, Punta Cardon
89,220 bbls, Asiatic Petroleum Corp, El Palito
106,937 bbls, Mobil Oil Co, Puerto La Cruz
110,444 bbls, Asiatic Petroleum Corp, Curacao
106,885 bbls, Esso Standard Oil Co, Tampico
151,501 bbls, Humble Oil Co, Las Piedras
FURFURAL—896 tons, E I Dupont de Nemours & Co, La Romana
GALL—5 bbls, George Uhe Co, Barranquilla
GELATINE—300 bgs, King Shipping Co, Bremen
301 cks, Corbett & Co, Marseille
250 cks, Havre
135 bbls, Antwerp
GERANIUM OIL—3 cs, A Chiris Co, Casablanca
GHATTI GUM—55 bgs, Meer Corp, Bombay
GINGER—72 bgs, S B Penick & Co, Kingston
65 bgs, Gillespie & Co, Kingston
141 bgs, Rouraftic Trading Ltd, Lagos
35 bgs, London
GINGER PEEL—34 bgs, S B Penick & Co, Kingston
GLUE—300 bgs, Jung Forwarding Co, Avonmouth
800 bgs, First National Boston, Hamburg
GLUTAMIC ACID—10 dms, Antwerp
GOLD BRONZE POWDER—182 cs, L Uhlfelder, Hamburg
GRAPHITE—600 bgs, Joseph Dixon Crucible Co, Bremen
GUAR GUM—200 bgs, T M Duche & Sons, Rotterdam
GYPSUM, CRUDE—31,613 tons, U S Gypsum Co, Hantsport
HOOF & HORNMEAL—703 bgs, Hollingshurst & Co, Recife
1,256 bgs, Ossa Products Corp, Buenos Aires
HYDROXYCITRONELLAL—5 cks, George Uhe Co, Marseille
IODINE, CRUDE—100 dms, Bunge Corp, Yokohama
IRISH MOSS—50 bgs, Meer Corp, Havre
IRON BLUE—27 dms, Van Oppen & Co, Liverpool
IRON OXIDE—680 bgs, Frank D Davis Co, London
ISOCHINOLIN—5 dms, Terra Chemicals Inc, Rotterdam
KAMALA POWDER—34 bgs, Meer Corp, Bombay
KAOLIN—40 dms, E Fougera, London
KARAYA GUM—258 bgs, Morningstar Paisley Inc, Bombay
KOLA NUTS—200 bgs, D Steengrafe & Co, Kingston
295 bgs, Apapa
LACTIC ACID—50 dms, A Millner & Co, Liverpool
LACTOSE—110 dms, Laufer Shipping Co, Hamburg
LEMONGRASS OIL—28 dms, International Flavors & Fragrances Inc, Cochin
18 dms, Givaudan Corp, Cochin
18 dms, Fritzsche Bros, Cochin
36 dms, Maywood Chemical Works, Rotterdam
28 dms, Trubek Lab, Cochin
25 dms, Lo Curto & Funk, Puerto Barrios
LIME OIL—18 dms, Fritzsche Bros, Hamilton
1 dm, Port Au Prince
LIVER POWDER—22 cs, Philips Roxane, Rotterdam
22 dms, London
LOGWOOD EXTRACT—41 dms, American Dyewood Co, Kingston
MACE—14 cs, A G Dunn, Singapore
MAGNESIUM CARBONATE—1,200 bgs, Reheis Co, Liverpool
MAGNESIUM TRISILICATE—75 cs, Reheis Co, Liverpool
MANGROVE EXTRACT—600 bgs, Saxe Cutch Corp, Singapore
MELAMINE—80 bgs, Orlex Dyes & Chemical Corp, Kobe
220 bgs, Yokohama
80 bgs, Liverpool
MENTHOL—10 dms, Biddle Sawyer Corp, Cannes
60 cs, Lo Curto & Funk, Keelung
20 cs, George Uhe Co, Keelung
45 cs, George Uhe Co, London
11 dms, L A Champon & Co, Cannes
10 cks, Biddle Sawyer Corp, Marseille
MERCURIC POTASSIUM IODIDE—1 cs, P H Petry, London
MINERAL COLORS—166 bgs, Revelli Chemicals, Hamburg
MINERAL WAX—340 bgs, Hamburg
MINT OIL—1 dm, Ungerer & Co, Casablanca
MOLASSES—555 tons, W R Grace & Co, Salaverry
MOLYBDENUM DISULFIDE—1 cs, Atlantic Service Co, Glasgow
MUSTARD OIL—11 cs, Schimmel & Co, Hamburg
MUSTARD SEED—200 bgs, J Bieler, Copenhagen
NAPHTHALENE—333 bgs, Witco Chemical Co, Avonmouth
372 bgs, J N Forker, Avonmouth
640 bgs, Standard Naphthalene Products, Avonmouth
1,429 bgs, Rotterdam
300 bgs, Antwerp
NUTMEG—20 bgs, A G Dunn, Port of Spain
45 bgs, Gillespie & Co, Port of Spain
250 bgs, K H Landes & Co, St Georges
20 bgs, East India Trading Co, St Georges
40 bgs, Macassar
OITICICA OIL—400 tons, Irving Trust Co, Fortaleza
OLIVE OIL—75 dms, Bankers Trust Co, Seville
73 dms, J Ossola Co, San Feliu de Guixols
OURICURY WAX—389 bgs, H Hollander, Salvador
PALM OIL—317 tons, Procter & Gamble Co, Belawan Deli
560 tons, Belawan Deli
PALMAROSA OIL—4 pots, J Manheimer, Bombay
PAPAIN—110 cs, Chas L Huisking & Co, Mombasa
PAPRIKA—300 bgs, Casablanca
PATCHOULI OIL—2 dms, Perry Bros, Penang
PEPPER, BLACK—70 bgs, W S Force & Co, Singapore
630 bgs, A G Dunn, Singapore
320 bgs, Reliable Mercantile Co, Singapore
750 bgs, H M Newhall & Co, Singapore
80 bgs, J H Elton, Singapore
140 bgs, Polak Trading Co, Singapore
70 bgs, C Czarinkow, Singapore
210 bgs, American Commodity Trading Co, Singapore
260 bgs, Ludwig Mueller, Singapore
660 bgs, Singapore
PEPPER, RED—160 bgs, Lagos
PEPPER, WHITE—140 bgs, K H Landes & Co, Singapore
210 bgs, A G Dunn, Singapore
70 bgs, Ludwig Mueller, Singapore
PETROLEUM, CRUDE—198,812 bbls, California Oil Co, Sidon
81,853 bbls, Humble Oil Co, Las Piedras
193,270 bbls, Mobil Oil Co, Covenas
222,693 bbls, Signal Oil & Gas Co, Maracaibo
205,987 bbls, Humble Oil Co, La Salina
192,231 bbls, Phil ips Petroleum Co, La Salina
PHOSPHORUS, RED—50 cs, Bremen
PIMENTO—320 bgs, M J Golombeck, Kingston
80 bgs, Otto Gerdau, Kingston
40 bgs, Louis Furth, Kingston
80 bgs, Kingston
PIMENTO LEAF OIL—2 dms, Ungerer & Co, Kingston
4 dms, Fritzsche Bros, Kingston
2 dms, George Lueders & Co, Kingston
POPPYSEED—500 bgs, Izmir
100 bgs, Rotterdam
POPPYSEED OIL—26 dms, Welch Holme & Clark, Antwerp
POTASSIUM CYANIDE—100 dms, Chemical Manufacturing Co, Liverpool
POTASSIUM FERRICYANIDE—120 bbls, Atlantic Raw Materials, Hamburg
POTASSIUM FERROCYANIDE—500 bgs, Haras Co, Rotterdam
POTASSIUM PERCHLORATE—120 dms, Ugine Industries, Havre
POTATO STARCH—400 bgs, Antwerp
PYRETHRUM EXTRACT—60 dms, Mombasa
QUASSIA CHIPS—370 bgs, S B Penick & Co, Kingston
QUEBRACHO EXTRACT—1,383 bgs, Barkey Importing Co, Buenos Aires
1,276 bgs, Tac Tannins & Chemicals Inc, Buenos Aires
QUINIDINE SULFATE—30 dms, Lo Curto & Funk, Hamburg
RED LEAD—800 bgs, Rotterdam
RHATANY ROOT—31 bgs, Callao
ROMONTA WAX—220 bgs, Cornelius Wax Refining Corp, Hamburg
RUM ETHER—2 dms, Lo Curto & Funk, Rotterdam
SACCHARIN—50 dms, Cosmos Shipping Co, Yokohama
SAGE OIL—8 dms, S B Penick & Co, Rijeka
2 dms, George Lueders & Co, Rijeka
SAGO FLOUR—443 bgs, National Starch & Chemical Co, Liverpool
SAPONIN—20 cs, A K Peters Co, Valparaiso
SEAWEED—428 bls, Marine Colloids, Casablanca
SEEDLAC—1,500 bgs, Wah Chang Corp, Bangkok
SERPENTINA ROOT—92 bgs, Meer Corp, Bangkok
SHELLAC—27 dms, F H Paul & Stein Bros, Bremen
SHELLAC WAX—20 bgs, Mantrose Corp, Bremen
SODIUM CACODYLATE—2 cs, Havre
SODIUM CYANIDE—550 dms, Chemical Manufacturing Co, Liverpool
SODIUM LAURYL SULFATE—25 cs, Continental Chemical Co, Yokohama
20 cks, Liverpool
SODIUM PHOSFATE—5 cs, M J Corbett, Rotterdam
TALC—3,000 bgs, Charles Mathieu, Genoa
TALLOW, VEGETABLE—30 bgs, Capetown
TAMARINDS—68 bbls, Murbas Trading Co, Port of Spain
TAPIOCA FLOUR—3,443 bgs, Geismar & Co, Kosichang
1,120 bgs, Poong Co, Kosichang
200 bgs, Harry F R Dolan, Kosichang
1,120 bgs, Stein Hall & Co, Bangkok
TARTARIC ACID—2,100 bgs, Leonhardt & Brush, San Feliu de Guixols
TERPIN HYDRATE—23 cks, Bordeaux
THEOBROMINE—4 cks, Havre
THYMOL—25 dms, Henley & Co, Hamburg
THYROID POWDER—6 dms, Hudson Pharmacal Co, Copenhagen
5 dms, Van Gelder Fanto Corp, Copenhagen
TITANIUM DIOXIDE—300 bgs, American Enka Corp, Rotterdam
TITANIUM DIOXIDE, RUTILE—1,102 bgs, Havre
TONKA BEANS—40 cs, J M Rodriguez & Co, Belem-Para
TRICHLOROETHYLENE—100 dms, Leghorn
UREA—1,500 bgs, Nylos Trading Co, Genoa
1,320 bgs, Cosmos Shipping Co, Yokohama
VANILLA BEANS—10 cs, Gillespie & Co, Marseille
VEGETABLE OIL—5 dms, Heemsoth Kerner, Aarhus
VETIVER OIL—2 dms, Lo Curto & Funk, Port Au Prince
2 dms, Port Au Prince
VINCA ROSEA LEAVES—50 bls, Meer Corp, Madras
WATTLE EXTRACT—658 bgs, Hammond & Carpenter, Durban
WAX—100 bgs, A Fahner, Hamburg
350 bgs, Hostawax Co, Bremen
WHITE LEAD—200 bgs, Rotterdam
YLANG YLANG OIL—1 cs, Olfactors Inc, Marseille
1 cs, Fritzsche Bros, Marseille
2 cs, A Chiris Co, Marseille
2 kgs, Havre
ZINC OXIDE—882 bgs, Smith Chemical & Color Co, Havre
805 bgs, London

Los Angeles

CARAWAY SEED—75 bgs, Hismoco American Co, Rotterdam
835 bgs, Buenos Aires
CASSIA—704 bls, Magna Enterprises, Djakarta
CREOSOTE—350,145 gals, Amsterdam
FISHLIVER OIL—2 dms, Mitsubishi Corp, Yokohama
10 dms, Bergen
IRON OXIDE—700 bgs, F D Davis Co, London
KELPMEAL—200 bgs, J L Ohman, Stavanger
NAPHTHA—15,416 bbls, Powerline Oil Co, Aruba
52,197 bbls, Golden Eagle Refining Co, El Palito
NUTMEG—28 bgs, Port of Spain
PETROLEUM, CRUDE—123,186 bbls, Douglas Oil Co, Maracaibo
177,644 bbls, Richfield Oil Corp, Punta Cardon
140,213 bbls, Powerline Oil Co, Aruba
326,325 bbls, Standard Oil Co, Dumai
469,290 bbls, Union Oil Co, Mina Al Ahmadi
STARCH—205 bgs, Morningstar Paisley Inc, Rotterdam
TAPIOCA FLOUR—1,904 bgs, Stein Hall & Co, Kohsichang
1,344 bgs, Brown Bros, Bangkok
1,120 bgs, Morningstar Paisley Inc, Bangkok

Philadelphia

ANTIMONY—80 cks, Liverpool
90 cs, Rijeka
ASBESTOS FIBER—1,000 bgs, N American Asbestos Corp, Durban
400 bgs, Central Asbestos Co, Port Elizabeth
3,380 bgs, Johns Manville Corp, Lourenco Marques
2,880 bgs, Keasby & Mattison, Lourenco Marques
BONE—1,251 bgs, Swiss Credit Bank, Buenos Aires
956 bgs, Baugh & Son, Buenos Aires
CALCIUM CARBONATE—1,600 bgs, Hammill & Gillespie, London
1,600 bgs, Pluess Staufer, Antwerp
4,000 bgs, Antwerp
CARAWAY SEED—75 bgs, Rotterdam
CASEIN—500 bgs, Buenos Aires
67 bgs, Rotterdam
CHESTNUT EXTRACT—340 bgs, Chase Manhattan Bank, Naples
CRESYLIC ACID—100 dms, Concord Chemical Co, Rotterdam
DICALCIUM PHOSPHATE—830 bgs, J H Schroder, Antwerp
GLUE—40 bgs, First National Boston, Hamburg
GYPSUM, RUDE—11,350 tons, National Gypsum Co, Halifax
6,308 tons, U S Gypsum Co, Hantsport
IODINE, CRUDE—60 kgs, Phila National Bank, Yokohama
MAGNESITE—867 tons, Split
2,000 bgs, Sibenik
MAGNESIUM OXIDE—1,000 bgs, Darlington Chemicals, Glasgow
MANGROVE EXTRACT—1,000 bgs, Saxe Cutch Corp, Singapore
MENTHOL—45 cs, Bankers Trust Co, Santos
NAPHTHENIC ACID—50 dms, International Chemical Corp, Hamburg
OLIVE OIL—30 dms, Chase Manhattan Bank, Seville
PEATMOSS—1,400 bls, Premier Peatmoss Corp, Hamburg
785 bls, Keer Maurer, Bremen
600 bls, Marine Midland Trust Co, Rotterdam
1,000 bls, E Dunwoody, Bremen
PETROLEUM, CRUDE—184,464 bbls, Texaco Co, Covenas
195,882 bbls, Texaco Co, Sidon
103,886 bbls, Delhi Taylor Oil Corp, Puerto La Cruz
179,125 bbls, Gulf Oil Corp, Bachaquero
321,346 bbls, Gulf Oil Corp, Mina Al Ahmadi
133,446 bbls, Mobil Oil Co, Covenas
115,000 bbls, N Western Refining Co, Puerto La Cruz
228,671 bbls, Atlantic Refining Co, Puerto La Cruz
133,000 bbls, Sunray Midcontinent Oil Co, Maracaibo
114,527 bbls, Continental Oil Co, San Lorenzo
210,000 bbls, Continental Oil Co, Mina Al Ahmadi
PHENOBARBITAL—10 cs, Physicians Drug & Supply Co, Rotterdam
PHOSPHATE ROCK—4,700 tons, H J Baker & Bro, Curacao
POTASSIUM BICARBONATE—45 cks, Rotterdam
PYRIDINE—120 dms, Kolon Trading Co, Antwerp
QUEBRACHO EXTRACT—1,530 bgs, First National Boston, Buenos Aires
RUTILE SAND—538 bgs, Sydney
TAPIOCA FLOUR—672 bgs, First National Boston, Kohsichang
896 bgs, Kohsichang
TARA POWDER—2,877 bgs, Salaverry
WATTLE BARK—830 bls, Morgan Guaranty Trust Co, Durban
WATTLE EXTRACT—527 bgs, International Products Corp, Durban
ZINC OXIDE—1,200 bgs, Pigment & Chemical Co, London
300 bgs, Rotterdam

San Francisco

BONEMEAL—1,348 tons, Stauffer Chemical Co, Rosario
CALCIUM CARBONATE—2,000 bgs, Pluess Staufer, Antwerp
CASEIN—100 bgs, First Spice Co, Amsterdam
COPPERAS—340 bgs, P W Bellingall, Kobe
COPRA—1,700 tons, Cargill Inc, Cebu
500 tons, Cargill Inc, Tabaco
FISHMEAL—4,370 bgs, Balfour Guthrie, Arica
10,025 bgs, Marine Midland Trust Co, Arica
5,457 bgs, Marine & Animal By Products Corp, Arica
GYPSUM, CRUDE—16,253 tons, Kaiser Gypsum Co, San Marcos
NUTMEG—100 bgs, Port of Spain
PETROLEUM, CRUDE—335,270 bbls, U S Oil & Refining Co, Dumai
294,890 bbls, Standard Oil Co, Dumai
SESAME SEED—50 bgs, R J Spitz, Corinto
50 bgs, W R Grace & Co, Corinto
100 bgs, Neiman Bros, Corinto
SODIUM NITRATE—4,708 bgs, Morgan Guaranty Trust Co, Tocopilla
910 tons, Tocopilla
SODIUM SULFATE MONOHYDRATE—100 bgs, P W Bellingall, Antwerp
THIOUREA—73 bgs, Mattoon & Co, Yokohama

Drug Rules Revision: the Big Idea Is Okay

—Continued from page 3

contrasts with that on the legislation pending in congress to revise the food, drug and cosmetic law to broaden FDA's authority over industry (OPD, 8/15/60).

It lends support to expressed beliefs that the agency is more in need of additional funds to enforce the authority it already has than it is in need of new authority.

The changes in the new drug regulations proposed by FDA would have these main effects:

- Require all labeling on or within the prescription drug package to carry full information about the drug.
- Promotional or advertising material could not exceed the claims made for the drug in the FDA-cleared brochure or labeling.
- FDA could inspect production processes before making a new drug application effective.
- Any new claim for a drug would have to be first submitted to FDA in the form of an amended new drug application.
- Drug labeling would have to carry identifying lot or control numbers making it possible to determine the complete manufacturing history of the drug.
- Labeling for ophthalmic and injection medicines would have to list inert as well as active ingredients.

PMA says that its objectives are the same as those of FDA, but will ask for a number of modifications in the proposed regulations to make them more workable from industry's standpoint as well as that of FDA. The important revisions to be sought are these:

- Permit companies to file confidential statements on the inert ingredients of ophthalmic and injection medicines, instead of printing the information on the label, to protect valuable trade information developed by years of research.
- Establish a central agency entrusted with the responsibility of printing full drug information on cards or sheets and supplying copies to all physicians and pharmacists. This would be an alternative to the FDA's proposal that all sales packages contain full information on the drug since the sales packages seldom reach the physician.
- Make the central agency responsible for notifying medical and allied professions of any changes in information concerning a drug, including new claims, thus avoiding the chaos that would result in the trade from frequent replacement of brochures, as required under the proposed regulations.
- Establish a six-month effective date after issuance of the final order to allow industry time to adjust itself to the new requirements and procedures.
- Provide that "reminder advertising" contain a precautionary statement to the effect that before prescribing, physicians should read the official brochure, which would be sent to them by the manufacturer.

This statement would replace the requirement that all advertising that furnishes information for use of the drug also supply "indications, effects, dosages, routes, methods and frequency and duration of administration and any relevant hazards, contraindications, side effects and precautions . . ."

- Permit inspection of subsequent batches after a notification of intent to inspect within forty-five days of filing. The regulations contain a mandatory requirement for inspection of the first production batch.
- Provide that the dating requirement for labeling (including advertisements) exclude package labels so as not to confuse the date with the expiration date of the medication.

Corn Products Appoints Two to Division Position

Corn Products Sales Company, New York, has named Edward W. Beardsley southern regional vice-president for the industrial division and has appointed Thomas A. Bruce to succeed him as assistant western regional manager.

Mr. Beardsley will headquarter in Atlanta, Ga., where he will succeed Fred C. Hassman, who is becoming southern regional vice-president of the Best Foods Division.

Mr. Bruce, associated with Corn Products for more than forty years, had recently held administrative posts for the company in New York.

Nickel Question

—Continued from page 5

The mines and plant have, in fact, been closed since last March, when the Cubans demanded a 25 percent tax on exports from the facilities.

The seizure followed a company suspension of negotiations over the future of the plant. Freeport officials told the Cubans they thought the talks should be broken off because of the tense situation existing between the governments of the two countries.

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Essential Oils, Aromatics

Two hearty advances and one decline were noted among the essential oils. Already a firm market, grapefruit advanced 75 cents per pound. Sandalwood advanced $1 per pound, and Bourbon geranium declined $1.50 per pound. Of the most interest probably, was the advance in sandalwood. Material was already at virtually inflationary levels with some users fearful they would have to switch over to other types of perfuming agents. The reason the market is so tight is that the auctions, held in Mysore a few weeks ago, offered much less material than normal. Word from source is that shipping prices are quite high—for material for delivery as far into the future as November. The soonest there might be an easing off, say informed sources, is in December when the next big auctions take place.

Otherwise, patchouli is said to firm as is peppermint. The word is that there is considerably less peppermint this year than there was last and that the farmers are holding on to their supplies until the price gets a bit higher. Spearmint continues weak as does lemongrass. Citronella from Formosa, while it hasn't advanced on spot, is said to be quite firm at source. The reason: typhoons that hit the island earlier this month which are said to have had damaging effects on the crops as well as the distilleries.

According to the Department of Agriculture, the peppermint crop is forecast at 2,024,000 pounds. This is 13 percent less than last year's crop, but 8 percent more than the average year's production. The department predicts the spearmint crop to be 1,188,000 pounds. This is a gigantic 59 percent more than last year's crop and more than twice the size of the average year's crop.

The department reported that wet weather in Oregon in May retarded peppermint growth and made it difficult to spray the crop. For this reason, stands are uneven and growth was behind schedule as of August 1.

During June and July, hot weather was responsible for wilt in Linn and Marion counties. In Jefferson county, spider mites are reported to have caused damage.

Hot weather in July in Washington helped the crop, but it did not make up for the damage the cold weather and freezes early in the season had done.

In general, insects and wilt are heavy.

Crops in Wisconsin have suffered under the hand of adverse weather conditions early in the season. Weeds are reported to be a big problem.

Harvest began in Michigan the end of July. Cutting of the Indiana crop was almost half finished in August. Good weather during July improved yields.

About spearmint: Yields are running a bit lower in Michigan and Indiana. Harvest began in Washington toward the end of July and was in full swing August 1. Yields are slightly lower than last year but acreage is considerably above last year.

In response to numerous questions, we offer the following information about the food additives amendment.

A food additive is defined by law as any substance that voluntarily or otherwise is introduced into a food product.

If the food should contain traces of such substances as plastic materials migrating from a wrapper or metals dissolved from processing machinery or catalysts used to promote process reactions, such substances become food additives unless their safety has been established or a regulation exists prescribing the conditions under which they may be safely used.

Under the amendment, a manufacturer must petition the Food & Drug Administration for a special regulation permitting the use of a substance as a food additive.

When the government scientists are satisfied that a proposed additive has been tested adequately to prove its safety, an order will be issued permitting its use within certain prescribed limitations, such as amount and condition of use.

Further information is available in a booklet published by the Manufacturing Chemists' Association. Copies are available from the association at 50 cents each. The address is 1825 Connecticut Avenue, N. W., Washington 9. D. C.

Price Trends

Advanced

Grapefruit, 75c. per lb.
Sandalwood, $1 per lb.

Reduced

Geranium, Bourbon, $1.50 per lb.

Comparative Price Indexes

(100—1949 average)

Last week	Prev. week	Last month	Aug. 21, 1959
145.99	145.97	146.14	147.43

For Current Prices see page 9

Imports Detained at N. Y.

Week Ended August 8, 1960

Black pepper, 4 bags
Cassia, 3 lots, 914 bales
Celery seed, 17 bags
Chillies, 2 lots, 317 bags
Coriander seed, 5 lots, 1,500 bags
Cumin seed, 70 bags
Fennel seed, 110 bags
Fenugreek seed, 137 bags
Kola nuts, 295 bags
Mace, 20 lots, 436 bags
Mustard seed, 188 bags
Nutmegs, 7 lots, 445 bags
Sesame seed, 5 lots, 2,205 bags

Essential Oils

Citronella—The market at source continues firm as a result of the two typhoons that struck Formosa earlier this month.

Spot prices, however, remain at their previous levels. Materials from Formosa remains at 92c. per pound and material from Ceylon remains at $1 per pound.

No official word on the extent of the damage has been reported to New York brokers. At last word, however, there was some fear that not only the crop has been damaged, but that some of the distilleries were destroyed either by winds, rains or floods.

Geranium — Spot prices are reflecting the general easing off of the market. From its previous level, $30 per pound Bourbon material has declined to $28.50 per pound.

From source comes the word that production is up and supplies becoming plentiful.

Grapefruit—A firm market for some time, grapefruit rose in price last week. From its previous high, $3.50 per pound, it climbed to $4.25 per pound.

This high price is rather startling, especially when one realizes that as recently as 1957, the price was only $1.50 per pound.

In fact, according to the OPD, 1960 Chemical Price Issue, the current price is the highest grapefruit oil has been during the past 8 years.

From the Foreign Commerce Weekly comes the information that Italian lemon production in 1960-61 is expected to be about equal to that of 1950-60. This is an estimate of the Italian Foreign Trade Institute.

Lemongrass—The market is said to be marking time. Sales are slow.

Orange—Material is said to be moving in good volume. Prices remain at their previously quoted levels:

California sweet distilled, 60c. per pound; Florida sweet distilled, 35c. per pound; California expressed, 70c. to 90c. per pound; Florida expressed, 45c. to 50c. per pound; Messina, $3.25 to $5 per pound, and West Indian bitter, $2.50 to $3.25 per pound.

Neroli—Material continues to range in price between $425 and $575 per pound.

It is interesting to note that his oil is produced from bitter orange trees that grow along the Mediterranean coast of France between Cannes and Grasse. The main harvesting is from late April to late May or early June. This depends on weather conditions and no matter when the harvesting begins, it lasts only about three weeks.

Most of the picking is done by women and children who stand on ladders and drop blossoms on sheets which are spread on the ground. Blossoms must be picked

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Essential Oils

just as they are beginning to open, according to printed data.

If they are not open enough, the oil distilled from them is "green." If they are open too much, they are likely to fade and spoil on their way to the distilleries.

To further complicate the picture, flowers gathered on rainy or foggy days give a low-grade of oil. Pickers must be careful to pick only the blossoms and not include any of the leaflets and petioles which impart a harsh note to the distilled oil.

Some neroli trees live to be 10 to 100 years old.

Their best producing years are between the time they are 20 and 30 years old, however.

Groves are handed down from fathers to children and are considered a valuable inheritance.

Patchouli—The market is said to be firming. Prices remain at their previously quoted levels, from $5.50 to $6.50 per pound.

Peppermint—Material remains at its previous levels, but reports continue to come in that the market is firming.

Sandalwood—Material on spot has risen in price from $20 per pound to $21 per pound. And, it is reported, that shipment prices are higher than source prices for delivery as far away as November.

News sources here say that there can't be any relief until at least December when the next big auction takes place and even then there's no guarantee that prices will recede.

Dealers on spot are pretty well agreed that the supply of sandalwood on hand is tight.

Seeds and Spices

Pepper—Prices rose slightly last week. Malabar black advanved from 58c. per pound to 58½c. per pound; Lampong black rose from 58c. per pound to 58½c. per pound, and Muntok white rose from 82c. per pound to 84c. per pound.

Benzene Process in Test

—Continued from page 3

now: It has no interest in petroleum toluene or xylene.

Four years old, Southampton is an independent oil refiner whose main business has been reforming motor fuels and pentane isomerization.

Meanwhile, Signal Oil & Gas Company indicates that it has a declining interest in toluene and xylene. The concern has just let it slip that it is installing a "Hydeal" unit at its Houston, Tex., refinery to convert toluene into benzene.

The facility, which is due to get into production by year-end, will boost Signal's benzene capacity at Houston to 21 million gallons a year—about double the present potential there.

Best known "Hydeal" plant—which will turn out 75 million pounds of naphthalene a year—is slated to be started up in February at Ashland, Ky., by Ashland Oil & Refining Company.

Ashland is a co-developer of the "Hydeal" process with Universal Oil Products Company of Chicago.

Besides Ashland's, there are two other known "Hydeal" units: Suntide Refining Company's benzene extraction plant at Cirpus Christi, Tex., and another undisclosed benzene unit in that state (probably Crown Central Petroleum Corporation's at its Pasadena, Tex., refinery).

Nearly a half dozen other benzene producers are believed to be waiting on the sidelines to see how Southampton Refining fares with its "Hydeal" plant.

In fact, the units reportedly are already in the design stage and all that's needed to spring loose this added benzene capacity is the final "go-ahead."

Goodrich In ABS Polymers

—Continued from page 5

calendering and injection-molding equipment.

Their "wide permissible service temperature range and excellent impact resistance have earned them a secure place in the commercial thermoplastic market," the company believes.

Applications foreseen for "Abson" resins: appliance parts where heat distortion is a problem, auto dashboards, refrigerator linings, luggage, helmets, telephone handsets, cowls and arm rests for autos and boats, camera cases, toys, tool handles and shoe heels.

"Abson" resins will be available, Goodrich reports, in free-flowing, ivory-colored powders requiring a minimum of compounding. The materials require no stabilizers.

The ABS resin venture puts Goodrich into a market which has been long ruled by Marbon Chemical Division of Borg-Warner Corporation, Washington, W. Va., and Naugatuck Chemical, a division of United States Rubber Company, Naugatuck, Conn.

FDA Corrects Its List Of Adhesives Migrants

A number of corrections have been made by the Food & Drug Administration in its list of substances migrating from adhesives used in food packaging. The products have been granted additional time for testing to comply with the tolerance provisions of the food additives law.

The list of extensions was published by the agency in the *Federal Register* March 17. The corrections are for the purpose of replacing trade names with the chemical names. Deleted from the March 17 list were the following:

Butyl carbitol acetate; butyl cellosolve; carbitol; carbitol acetate; cellosolve; cellosolve acetate; methyl carbitol; and methyl cellosolve.

The following have been added to the list:

Diethylene glycol monobutyl ether acetate; ethylene glycol monobutyl ether; diethylene glycol monoethyl ether; diethylene glycol monoethyl ether acetate; ethylene glycol monoethyl ether; ethylene glycol monoethyl ether acetate; diethyline glycol monomethyl ether; and ethylene glycol monomethyl ether.

Chemical People Want

—Continued from page 4

gress made no provision in the trade agreements law for modification of recommendations of the Tariff Commission, but on the contrary had specifically rejected amendments to the law that would have given him this discretionary authority.

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Branches: Cleveland, Ohio and Edgewater, N. J.

Petroleum Derivatives

Negotiations concluded this summer, and only recently revealed, resulted in a Chicago firm becoming the exclusive supplier of paraffin wax to Mexico. Basis of the contract is that for each barrel of US paraffin wax purchased by Mexico, the Chicago firm will buy one-an-one-half barrels of Mexican residual oil, a product in long supply south of the border. It is estimated the yearly exchange will involve 15,000 to 18,000 tons of paraffin wax for 180,000 to 200,000 barrels of residual oil. Already in effect, the contract carries no expiration date but is cancellable upon due notice.

Reaction to the concluded arrangement by other US suppliers is one of disappointment as they see a market cut off with little chance of it being regained in the near future. There has been some talk by the ousted suppliers of concerted action in an effort to oppose the exclusive agreement. As yet no definite plans have been forthcoming, however. The attitude of the trade now seems to be one of wait and see, as opinions have been expressed that Mexico may not be able to fulfill her needs through the resources of one firm.

In other products, benzene continues tight with rumors once more circulating concerning a fourth quarter price hike. Some observers feel a rise is long overdue. Other spokesmen, while arguing that an increase is not called for in view of increased capacity soon to come on stream, confess that a price rise would not come as a shock. Opinions concerning the extent of any possible increase range from 2 cents to 3½ cents a gallon with the former figure a more likely prospect.

Aromatic Solvents

Benzene—Tight supply remains the keynote for this chemical.

Demand continues high with the burden of supply still resting with petroleum producers as Tariff Commission figures reveal oil firms churning out material at breakneck pace.

In the first five months of this year 119,836,393 gallons were produced by petroleum producers. In the same period last year 73,272,308 gallons were turned out.

In the last three months production has approached or exceeded the 27 million gallon-a-month mark. Even at this rate inventories remain low or non-existant and exporters are bidding 10 to 12 cents above domestic market contract price.

With regard to the competition, benzene from cokeoven sources is marginally up from last year but still restricted in growth by the lagging steel rate. The first five months this year reveal production from cokeoven sources to be 73,115,965 gallons as compared with 68,082,948 gallons in the same period last year.

Toluene—In the words of one trade source, toluene is edging into a position more comfortable for the seller than the buyer.

Earlier this year toluene's supply position was sloppy. The last few months have seen the market firm somewhat as traditional demand areas began sending forth calls for seasonal usage. Aviation gas, motor fuel, insecticide, all reach peak application during the summer months with the result that producers receive more frequent and heavier inquiries for material.

In addition, some toluene has been converted to benzene to reap the higher prices that chemical commands. Toluene supply suffers accordingly.

Total result is that toluene is now much firmer than it was in winter or spring. No shortages exist, no price increase is contemplated, but there are local supply problems cropping up occasionally as occurred in the Gulf area earlier this summer when a large export order could not be immediately filled.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Aug. 21, 1959
103.74	103.74	103.74	104.42

For Current Prices See Page 9

Aliphatic Solvents

Heptane—Reports from one producer indicate calls from the rubber cement, adhesives and allied industries have dipped fractionally but the change is not regarded as significant. If anything, it is the result of seasonal summer drop in industrial production rather than any concrete market factor.

Currently, hexane, tankcars, New Jersey and New York, is priced at 20c. a gallon with Houston posting a price of 16¼c.

Hexane—Use of the high purity product for chemical uses is reported to be moving well, according to one producer contacted last week. Vegetable oil extraction application is dormant and expected to remain so until later this Fall.

Price is unchanged from previous reports.

Waxes

Microcrystalline—Sales are good, reports one supplier. Calls from the packaging industry for material for use in carton and container coverings are well sustained.

Predictions are that demand will increase in a general steady growth pattern. Present supply is termed ample and estimates by the trade are that any future increase in demand can be adequately met.

Material in coating grades, in tankcar quantities, at works, is priced at 10c. to 11c. a pound.

Laminating grades, same basis, is a cent higher at 11c. to 12c.

Paraffin—Under terms of an agreement reached this summer, a Chicago-based broker is now the exclusive US exporter of paraffin wax to Mexico.

The contract concluded late in June, and only now being revealed, is based on the purchase of one barrel of US paraffin for the purchase of one-and-one-half barrels of Mexican residual. Current Mexican paraffin demand is 120,000 barrels yearly, or 50 tankcars a month. It is estimated by the Chicago firm that on a yearly basis the exchange will be 15,000 to 18,000 tons of paraffin for 180,000 to 200,000 barrels of residual.

Mexico initiated negotiations in effort to reduce long supplies of residual, according to the US company. While there is no expiration date stated in the contract, there is a ninety-day cancellation notice stipulated.

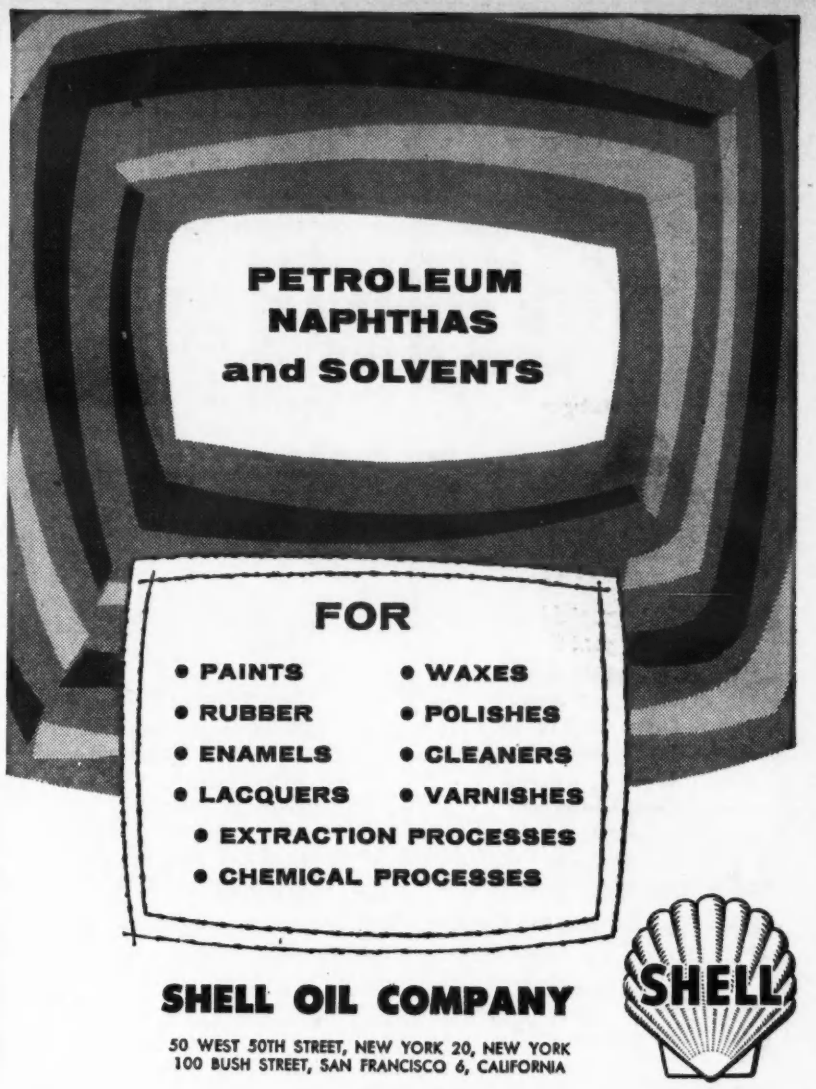
It is not known definitely to what use the residual oil will be put by the US firm. As is known, an import quota issued by Department of Interior is required for importation of residual oil into the US for domestic use. The Chicago firm does not have a quota. However, the residual is to be delivered to a Mexican port on the Gulf where the US firm may then dispose of it through whatever channels it wishes. If the company so desires it may even import the oil into the US without a quota if the oil is to be trans-shipped, or used to fuel foreign vessels at US docks.

Other US suppliers see the exclusive agreement resulting in lost business which stands little, if any, chance of being regained.

Developments in other foreign countries have not proved encouraging to US wax producers, either. Brazil has recently opened a refinery which should prove to be stiff competition and the Union of South Africa has instituted an anti-dumping duty aimed at US wax (but not applied to Japanese or Indonesian, it is noted) and has opened a wax refinery employing a German supplied process.

Crude Oil Stocks

Stocks of domestic and foreign crude petroleum at the close of the week ended Aug. 6 totaled 241,163,000 barrels according to data reported by the Bureau of Mines. Compared with the total of 242,821,000 barrels the preceding week, this represents a decrease of 1,658,000 barrels, comprising a decrease of 2,369,000 barrels in stocks of domestic crude and an increase of 711,000 barrels in stock of foreign crude.



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Trade Name Chemicals & Specialties

Antibacterial agents are widely employed in protection of leather, starches, gums and other organic materials against attack by micro-organisms. In textile processing, these materials (usually phenol derivatives) prevent spoilage of print pastes, sizes, finishes and adhesives. The preservative acts to suppress the action of molds and bacteria which thrive on the moist, humid conditions frequently encountered in textile and leather processing operations. High temperatures may be necessary to speed certain operations, but here again the increased temperature also accelerates the growth of bacteria. This can result in losses of hundreds of dollars in fur, textile or paper products, which might have been avoided through judicious use of a small amount of preservative.

Monsanto Chemical Company, manufacturer of **"Santophen 1,"** a phenolic germicide, has started construction of a new unit at Monsanto, Ill., which will double production capacity for the product. The company reports that sales of the material have more than tripled in the past five years.

A new dyeing assistant, tradenamed **"Cyanatex EM"** for polyester triacetate and acetate fibers, has been developed by American Cyanamid Company. The product is supplied in dilutable emulsion form and works to accelerate penetration of the dye into fiber at below boiling point temperatures. The results, Cyanamid reports, are shorter dyeing cycles, lower dyeing temperatures and better color values.

Fine Organics, Inc., Lodi, N.J., reports marketing of a new cutting oil additive tradenamed **"W.S.G."** The material has been designed to extend the life of water soluble cutting oils by minimizing bacterial buildup. Equally important, the company says, is the deodorant property of **"W.S.G."** The product eliminates oil odors which may become overpowering in industrial shops during the summer months. The product works effectively at a concentration of one ounce **"W.S.G."** to 10 gallons of cutting oil, the company reports.

Metro-Atlantic, Inc., Centredale, R.I., has developed a new nonionic softener called **"Rezsoft NI"** which the company recommends for use as a lubricant and antistatic agent in textile applications. The product is an ethoxalated long chain alkyl hydroxylate ester and is reported as a "non-yellowing, non-chlorine retentive softener."

Antibacterials and Fungicides

Phenol derivatives continue to find widespread application in the leather industry where they are used as antibacterials in the protection of leather during processing.

Tanning operations such as dehairing, bating and vegetable tanning must be protected against growth of destructive bacteria and fungi. Salt tolerating bacteria during cure cause hair slippage, staining and tendering. Stock held in pickle, chrome or vegetable liquors may also be adversely effected by molds and other micro-organisms.

The action of molds is especially harmful during the warm weather months when hides and skins may be stored in a wet state after soaking and pickling. Discolored spots caused by mold growth are frequently impossible to eliminate and persist even to the final stages of finishing. In addition, a large amount of spoilage of stock in process results from use of contaminated vats, drums, floors and walls.

Dow Chemical Company recommends use of **"Dowicide A,"** **"B"** or **"G"** as preservatives for controlling micro-organisms attacking hides and leather. The products are water-soluble, yellowish to brown flake materials, having a charactersitic phenolic odor.

"Dowicide G," sodium pentachlorophenate, may be used effectively in soaking liquors to prevent excessive decomposition of hides when tanners encounter production delays due to emergencies. A treatment of one pound of the product to 1,000 pounds of wet skins will serve to protect the stock in pickling liquors for several weeks, the company says. Free phenol is precipitated from the product at pH values below 7. Thus, in chrome liquors, the leather retains the highly fungicidal free phenol in such concentrations as to prevent mold growth. Treatment of sawdust used in wetting back operations with a 1 percent solution of **"Dowicide G"** will prevent mold growth, Dow reports.

WHAT'S REPORTED ON HERE

Though coverage in the Trade Name Chemicals & Specialties market report encompasses twenty classes of chemicals, only a few of them are mentioned in this issue. Here's the entire list:

Adhesives, antibacterials and fungicides, antifoaming agents, antioxidants, antistatic agents, blowing agents, catalysts and accelerators, chelating agents, chemically processed oils, emulsions and latexes, enzymes, fatty acid derivatives, feed supplements, filtering materials, ion exchange resins, surfactants, synthetic waxes, textile chemicals, thickening and suspending agents, and ultraviolet absorbers.

If you have suggestions for any additional materials that might be included in this section, write OIL, PAINT AND DRUG REPORTER'S Technical Editor, 30 Church street, New York 7.

"Dowicide A," sodium o-phenylphenate, and **"Dowicide B,"** sodium salt of 2,4,5-trichlorophenol, are effective in preserving nitrogenous leather finishing materials such as casein, gelatin, and blood and egg albumin.

Antara Chemicals manufactures **"Preventol 1,"** sodium trichlorophenate which also finds wide use in suppressing action of molds in untanned skins, leather, albumin liquids and vegetable extracts and tanning liquors. **"Preventol 1"** is also recommended by the company for preservative use in the paper and textile industries as well as in adhesives and mineral oil emulsions. The product serves as a useful preservative for cotton sizes and finishes which contain starch or dextrin and promote mold growth by providing an additional source of carbohydrate.

The sodium pentrachlorophenate manufactured by Monsanto Chemical Company is marketed under the tradename, **"Santobrite"** and finds use in the preservation of paints and water-base adhesive and casein paint formulations. Since these products contain high percentages of animal or vegetable derived materials, they are readily attacked by fungi and other micro-organisms.

Latex and emulsion paints are especially subject to attack and the company suggests that potassium pentachlorophenate, prepared from **"Penta"** (pentachlorophenol) be used to protect these materials.

The presence of sodium ions in latex paints tends to cause formation of white crystalline deposits on dried surfaces. This is due primarily to sodium sulfate which comes from the substrate over which the paint is applied or from the paint constituents themselves.

Since potassium sulfates do not form hydrated crystalline masses in the manner of sodium sulfates, potassium hydroxide is used in preference to sodium hydroxide for adjusting pH and viscosity.

Recent years have seen development of numerous safe, effective skin bacteriostats for use in shampoos, soaps, shaving creams and other cosmetic and pharmaceutical applications. Monsanto markets **"Actamer,"** designated generically bithionol by the Council on Chemistry and Pharmacy of the American Medican Association. Chemically, the product is 2,2'-thiobis-(4,6-dichlorophenol) and is recommended for application to skin in such vehicles as soap, lotions and cosmetics.

Monsanto suggests the following prerequisites for a good bacteriostat for skin application: 1) the product must inhibit growth of bacteria in the presence of body tissue and must not be activated by any component of the preparations in which it is used; 2) the bacteriostat must be active at low concentrations, and 3) activity should persist long after application.

Other important characteristics of a good bacteriostat which is to be used in soaps, detergents, toilet preparations and cosmetics include: low toxicity, stability, compatibility with a broad range of formulations and absence of objectionable odor.

Coatings Materials

The routine aspect of the coatings market continued to be its main feature for the week. Prime pigments are moving normally with no price changes reported for any of the pigments. Supplies of the majority of the coatings materials are termed adequate in almost all quarters. Biggest exception still remains in regard to the plasticizers, particularly the phthalate esters. The supplies of these phthalate esters are reported to be on the verge of being critical. At the source of the tightness is steel's reduction in output. Naphthalene and phthalic anhydrides are still in the tight supply situation that has marked them for several months. With steel's return to about 65 percent capacity anticipated this fall, chemical men look for a lag of about a month before naphthalene begins flowing at normal rates. In the meantime, phthalate ester producers see no real improvement in the supply situation.

Presently, producers cite the example of one producer who has stopped production of dibutyl phthalate because it requires more phthalic per pound to produce than any of the other phthalate esters, as an indication of the tightness in supplies of the esters. It is reported that this producer is concentrating production on DOP and other of the phthalate esters.

Market for Argentine casein continued to be quiet, with some buying reported. Quotations for spot Argentine casein were in the range of 20¼ to 20½ cents per pound. One source reports that a possibility of an upward movement in the listings for the Argentine may in the cards due to the renewed buying interest.

Australian casein is said to be committed for the most part, and what is available is reported to be quoted in the range of 23 cents per pound, spot. Later arrivals are about one-half to three-quarters a cent per pound cheaper. While some French casein was reported to be offered, little interest was noted.

Price Trends

Advanced
None

Reduced
Casein, Australian, ¼c. per lb.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Aug. 21, 1959
103.16	103.16	103.16	103.03

For Current Prices See Page 9

Prime Pigments

Aluminum Paste and Powder—With market conditions at routine levels, the Census Bureau reports that gross shipments of atomised material during June totaled 1,408,000 pounds. This is well above the mark set for May when gross shipments were 766,000 pounds and for June of last year when 1,059,000 pounds were shipped.

Gross shipments of flaked material totaled 397,000 pounds in June as against 297,000 pounds for the previous month and 555,000 pounds for June of last year.

Gross shipments of aluminum paste amounted to 1,588,000 pounds, some 300,000 pounds above May's total but below that for June of last year when 2,287,000 pounds were shipped.

Carbon Black—In the first half of 1960, 997,557,000 pounds of carbon black were produced, according to estimates made by a leading carbon black producer. The producer's report indicates that shipments during the first half of the year were 954,082,000 pounds. When compared to the figures for the first half of last year, shipments increased by 6.4 percent and production was raised by 14.9 percent.

Second quarter shipments of carbon black totaled 348 million pounds and were 5.1 percent below the first quarter of 1960, and 10.8 percent above the second quarter of 1959.

Shipments for the first six months of this year were 5.4 percent over the same period last year and 1.1 percent under the second half of last year.

US consumption of dry rubber hydrocarbons amounted to 401.505 long tons. This was 4.2 percent less than in the first quarter of this year and 9.2 percent more than in the second quarter of 1959. The first half, with a record consumption of 820 thousand long tons, increased 5.3 percent and 0.7 percent over the first and second halves of last year.

The synthetic rubber ratio rose to 68.8 percent from 67.2 percent during the first quarter, again a new high.

The ratio of carbon black (including thermals) to rubber use was 41.2 pounds per hundred pounds of dry rubber hydrocarbon consumed during the quarter and averaged 41.1 phr. for the first half.

Although black rubber production was a record 78,781 long tons, it was practically level with the previous two periods. Production for the six months increased 44.2 percent and 5.5 percent from last year's first and second halves respectively. The net rubber (including oil content) in black rubber accounted for 18.8 percent of the dry SBR output in the quarter, with a high of 19.6 percent in the month of June.

Chrome Colors—The rate of production and level of stocks for the chrome colors remained on an even keel during the month of June. According to Census reports, production of chrome oxide green totaled 539 short tons in June, as compared to 332 short tons for the previous month and 663 short tons for June, 1959. Stocks were estimated at 602 short tons, down from the 719 short tons reported for the previous month.

Production of chrome yellow and orange (C.P.) was down slightly in June. Output for that month totaled 1,858 short tons, compared to the 1,910 short tons for May. For June of last year the amount produced was 2,214 short tons. Stocks of chrome yellow and orange were estimated at 3,035 short tons, roughly unchanged from the previous month's total of 3,218 short tons.

The output of molybdate chrome orange (C.P.), as reported by the Census Bureau was 593 short tons in June and 544 short tons in May. Last year, the output for June was set at 655 short tons. Stocks of molybdate chrome orange in June totaled 759 short tons, a slight drop from the 773 short tons reported for May.

Dry Colors—The situation here is reported to be normal. Prices are at their previously established levels. Sales are at their seasonal levels, with demand for the dry colors well sustained.

Titanium Dioxide—According to Census reports, the amount of pure, composite titanium dioxide produced during June totaled 37,626 short tons. Production during May totaled 42,460 short tons. For June of last year, production was placed at 40,838 short tons. Stocks of titanium dioxide were estimated to be at 81,920 short tons as against 87,852 short tons during the previous month.

Lacquer Materials

Cellulose Butyrate/Acetate—No change is reported for this lacquer material in either its longstanding price listings or in its supply situation.

Nitrocellulose—Demand from the furniture industry is reported to be well sustained. Prices are unchanged and supplies are considered to be well situated.

Plasticizers — With the supply of phthalic anhydride and naphthalene tighter than ever, particularly in the last few weeks, most producers report that supplies of the phthalate placticizers are only sufficient to handle their regular customers. Prices are of course firm in this tight supply situation.

As an indication of the scarcity of phthalic anhydride, one producer is reported to have stopped production of dibutyl phthalate due to the fact that it requires more phthalic anhydride per pound to produce than any other phthalate plasticizer. That producer is said to be concentrating his efforts on DOP and other phthalate esters.

Fillers and Inerts

Asbestos—The market situation for asbestos manufactured goods is reported to be depressed except for some government business where bidding is said to be extremely keen. The outlook is felt to be dependent on the return to full capacity in steel and other related industries.

June fibre shipments were 6,000 tons higher than the same period last year. Shipments for the first half are currently at a rate of 10 percent or 41,500 tons over

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Coatings Materials

the first half of last year. Sources in the industry attribute the increase entirely to the export market since domestic shipments are reported to be lower than those for last year.

Miscellaneous

Casein—Some buying was noted last week in the casein market, although the general tone of the market remained on the quiet side. Some sources report firming tendencies in regard to the Argentine material. Currently quoted at 20¼ to 20½ cents per pound, one source reports that there is a suggestion of possible price advances for that listing.

Australian casein is said to be pretty well committed at this time and what little material is available is reported to be quoted in the range of 22¼ to 22½ cents per pound, for shipments until December, with a spot price of around 23 cents per pound. Polish casein is said to be around 193/4 cents per pound to 20 cents per pound.

Natural Resins

Shellac—The routine market conditions that have been a feature for this market over the last month continue unchanged. Prices are reported to be at their old listings with supplies reported to be ample at both the foreign and domestic source.

Naval Stores

Pine Gum—For the week ended August 6, the average price paid per standard barrel of commercial crude gum was $40.20, compared to the price paid the previous week of $39.50. Exactly a year ago, the price paid per barrel was $28.60. Loan price this week was $26.

The volume of gum deliveries for the week ended August 12 totaled 19,200, including 93 loan. The previous week saw 19.532 barrels delivered, with 18,624 barrels delivered a year ago (including 91 loan).

The average barrel content of turpentine was 10.86 gallons, with rosin content set at 299.3 pounds. Gum grading was as follows: 56 WW; 19 WG; 10 N; 13 M; and 2 K and below.

Rosin, Gum
(USDA, per 100 lbs.)

	Fri. Aug. 12	Mon. Aug. 15	Tues. Aug. 16	Wed. Aug. 17	Thurs. Aug. 18
Drums—					
K	...	...	...	$16.50	...
M	$15.50	...	...	...	$16.50
N	...	...	...	15.00	...
WG	15.00	...	...	17.03	...
WW	...	...	...	17.00	...
Bags—					

Tankcars (for week ended Aug. 19)—
WG and below, $15.50

Sales, USDA
... 5‡ 850* 7‡

New York
(Per 100 lbs., c.l., Friday)
WW, $14.75; WG, $14.60; N, $14.50; K-M, $14

Turpentine, Gum
(USDA, per gal., 7.2 lbs.)

Price	...	...	...	.455	.455
Sales	...	...	...	8,000¶	8,000¶

* Drums equivalent. ‡Carlots. ¶Gallons.

Monsanto on Maleic

—Continued from page 3

year, according to Dr. John R. Durland, product director for resin materials in Monsanto's organic chemicals division.

Thus, he points out, the 1960 tempo is some 63 percent over the 52 million pounds of anhydride produced by US makers in 1958.

Why is Monsanto so high on maleic? Dr. Durland suggests a few reasons:

- Polyester resins for reinforced plastics account for about 30 percent of current maleic consumption. Their market has grown at an annual rate of 15 percent in recent years.
- Alkyd and vinyl-based surface coatings, which Dr. Durland estimates for another 30 percent of the resin material's market, are another area of strong, continuing growth.

Besides all this, the Monsanto man adds, maleic also finds uses in agricultural chemicals, petroleum additives and as an intermediate in chemical processes.

Whether these markets are strong enough to justify the recent spate of expansion announcements remains to be seen. According to OPD's reckoning, US maleic capacity will total some 259 million pounds by 1962. Demand, however, is not expected to reach 120 million pounds a year until 1965.

Besides Monsanto, here are the other producers in maleic anhydride:

American Cyanamid Company—20 million pounds of capacity at Bridgeville, Pa.

California Chemical Company—It's building a 20-million-pound-a-year plant at Richmond, Calif.

Heyden Newport Chemical Corporation—Its 24-million-pound-a-year plant at Fords, N.J., is due to go on stream shortly after the first of the year.

National Aniline Division of Allied Chemical Corporation—Now pegged at 40 million pounds, its plants at Buffalo, N.Y., and Moundsville, W. Va., are due to be hiked to a total of 60 million pounds by next year.

Petro-Tex Chemical Corporation—This newcomer expects to have a 30-million-pound-a-year plant in operation at Houston, Tex., by the middle of next year.

Pittsburgh Chemical Company—It will be in with 20 million pounds of maleic at Neville Island, Pa., by '61.

Reichhold Chemicals, Inc.—Capacity at its 5-million-pound-a-year plant at Elizabeth, N. J., is being boosted five-fold to 25 million pounds.

Delka Blends Urethane With Liquid Polyethylene

Delka Research Corporation, which has just moved from Farmingdale, L.I., to new enlarged quarters at Glen Rock, N.J., reports the successful blending of liquefied polyethylene or polypropylene resins with urethane.

According to Delka, the resins remain in liquid form without heat and can be further processed into protective coatings. The blending process reportedly results in a product with improved elasticity, water and acid resistance and better dielectric qualities.

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Oils, Fats and Waxes

Buying interest in oils and fats lagged last week. Crude coconut oil was inactive and freer offerings for shipment caused the market to drop sharply ½ cent, on the Pacific coast basis. Copra also was easier, with sales taking place at $7.50 per ton lower. Edible oils remained steady. Soybean oil was irregular but well held for prompt delivery. Corn oil was firmer, advancing ¼ cent per pound. Peanut oil was in limited supply and steady. Cottonseed oil was scarce and firm. Easier tone was noted in vegetable oil foots. Corn, cottonseed and soybean foots were lower due to increased offers and quiet demand.

Tallow and grease market was easier and slightly lower because of quiet trading and freer offerings. Export interest was slow.

Consumers of industrial oils continued to operate in a hand to mouth manner, Good demand continued for linseed oil for delivery against current contracts while new business was slow. Tung oil was quiet and shadable on firm bids as was Brazilian castor oil. Oiticica oil was quiet, but was held at former levels. Crude menhaden oil was weaker due continued slow demand for domestic and export delivery. Producers lowered prices ¼ cent per pound. There was no change for refined fish oils. Sperm oil continued strong because of the tight supply situation. Holders of limited supplies confined sales to regular customers.

Improved demand for soybean meal for domestic and export delivery reduced surplus stocks and market advanced 50 cents for unrestricted delivery and up to $1.50 in some areas. Linseed meal was quiet and lower, declining 50 cents per ton.

Price Trends

Advanced

Corn oil, crude, ¼c. per lb.
Refd., ¼c. per lb.
Soybean meal, unrest., $1.50 per ton.

Reduced

Coconut oil, crude, Pac. coast, ½c. per lb.
Copra, $7.50 per ton.
Corn oil foots, 95%, ½c. per lb.
Cottonseed oil foots, 95%, ¼c. per lb.
Greases, ½c. per lb.
Linseed meal, 50c. per ton.
Menhaden oil, crude, ¼c. per lb.
Soybean oil foots, 95%, ½c. per lb.
Tallow, inedible, ½c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Aug. 21, 1959
107.69	107.54	107.37	113.10

For Current Prices See Page 9

Vegetable Oils

Castor—This market was quiet. No. 1 Brazilian was offered at 19c. per pound, tankcars, New York, prompt delivery, with light trading at a shade less. Domestic grades were inactive and unchanged.

Brazil's 1960 castor bean crop is now forecast at about 204,000 short tons against 1959 production of 160,000 tons (revised), according to the Foreign Agricultural Service. Only 17,000 tons of oil have been exported through July but shipments may total 44,000 tons. No carry-over of oil expected. There was no carry-over of either beans or oil last year.

Imports of castor beans and castor oil at New York and Philadelphia last week were as follows:

	Pounds	
	Castor Beans	Castor Oil
Last week	.....	884.000
Previous week	.....	2.558.000
Corresponding week, 1959	3.135.300	1.614.000
Total this year	3.342.500	59.796.000
Corresponding period, 1959	18.835.750	62.722.000

Coconut—Crude was unsettled and fractionally lower. Trading was active at 12¾c per pound, tankcars, f.o.b. Pacific coast, prompt delivery. The New York market was easy and nominal, at 15c., tankcars, f.o.b. for prompt and later delivery.

Corn—Market was firmer, crude sales took place at 12c. per pound, tankcars, f.o.b. mills, prompt shipment. Refined oil was raise dto 15.737c., tankcars, New York basis.

Cottonseed—Futures were easy and lower until late in the week when liberal short covering in September, 1961, caused this month to reach a new high for this move. The advance of September was reflected in other months and prices were moderately higher. Trade interests continued to absorb September and sold March forward. Cash oil was quiet, but steady. Refined salad was unchanged at 13¼c. per pound, tankcars, New York basis.

Recent rains have delayed harvesting of early cotton in the southeast. Trading in crude oil was light. Prices are steady at 10c. per pound, tankcars, for September and 9¾c. October-December in the Mississippi Valley and throughout Alabama, Georgia and the Carolinas. Immediate delivery was quoted nominally at 10¼c., Valley and 10c. Waco.

Linseed—Trading was slow. Raw oil was maintained at 13.20c. per pound, tankcars, Minneapolis, August-November delivery and 14.31c. f.o.b. New York. Withdrawals against contracts continued in good demand.

Olive—Some improvement was noted for shipment from Spain, with actual sales reported still slow. Supplies on spot were named at $2.30 to $2.35 per gallon, drums, duty paid, according to quantity and quality. Spanish oil was quoted at $54 per 100 kilos, new drums, f.o.b. ports, for prompt shipment.

Palm—Demand was reported limited to actual needs. Market remained steady. Stocks on spot were said to be small. Drums were quoted at 14.40c. to 15.40c. per pound, spot, as to quantity and 11½c. for tankcars.

Peanut—Crude was sold at 16¼c. per pound, tankcars, f.o.b. mills, prompt shipment. Offerings were limited. Refined was quoted at 19½c., tankcars, New York basis.

Final support price for 1960 crop peanuts was announced at a national average level of $201.24 per ton average grade last week by the Department of Agriculture.

Soybean—Crude was irregular, but closed unchanged and steady. Tankcars were maintained at 9¾c. per pound, Decatur, unrestricted, delivery and 9⅝c., September. Refined salad was held at 11¾c., tankcars, New York basis.

Morocco last week purchased 4,000 tons of soya bean oil for September-October shipment and 2,000 tons of cottonseed oil first half November shipment.

Tung—Demand was confined to actual needs. Tankcars were unchanged and from 23c. nominal around per pound, New York, prompt delivery, as to seller. Drums were quoted at 24½c. to 25c., spot, depending upon quantity.

CCC last week sold 1 million pounds of tung oil at 15.026 per pound, bulk f.o.b., Marrero, La.

Tung oil imports from Argentina reached 13,327,483 pounds on August 8, according to the Treasury Department. This was virtually three-fourths of the allowable quota of 17,979,151 pounds for the period February 1, through October 31, 1960. The Paraguyan quota of 2,223,000 pounds had been completely filled as of August 8 while imports from othert countries amounted to 185,254 pounds out of a quota of 704,382 pounds.

Cottonseed Oil Futures

Sales and prices of prime summer yellow cottonseed oil futures in tankcars (60,000 pounds) on the N. Y. Produce Exchange for the week ended Friday, August 19, follow:

	Sales	High	Low	Close
		Cents per Pound		
Sept.	351	12.10	11.77	12.06S
Oct.	104	11.94	11.72	11.93S
Dec.	176	11.91	11.73	11.89S
March	145	11.97	11.81	11.91S
May	22	11.96	11.85	11.90@11.93
July	21	11.97	11.84	11.93S
Sept., 1961	31	11.85	11.75	11.84S

Total sales and switches, 850 contracts.

Miscellaneous

Copra—Shipments were easier and lower. Prompt shipment was sold and bid at $175 per ton, c.i.f. Pacific coast.

Flaxseed—Bids on cash flaxseed were unchanged at $3.10, spot and to-arrive, basis Minneapolis. Offerings were light. Main reason for the dearth of arrivals is the late harvest, augmented by marked holding tendency on the part of producers.

Fats and Greases

Greases — Buying interest was slow. Market turned easier, off ⅛c. Choice white was nominal at 7⅜c. per pound, tankcars delivered and yellow at 5c., same basis.

Lard—Market was unchanged and

—*Continued on page 62*

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1—Tolhurst 26" susp. Rubber Imperforate Basket.
2—Fletcher 48" Suspended 316 S.S. Perforated Basket.
2—Sharples #16, 304 S.S., 3 HP motor.

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2—Glascote 750 gal. glass lined jacketed Reactors.
1—1200 gal. SS jacketed Kettle.
1—650 gal. 304 S.S. Reactor with 100 sq. ft. Bayonet Heater.
1—1400 gal. Blaw-Knox, steel, jacketed, agitated Reactor.
1—700 sq. ft. Buflovak 304 SS forced circulation Evaporator.
1—550 sq. ft. Buflovak monel single effect Evaporator.
1—7500 gal. 316 S.S. Vert. Storage Tank, 7'x25', 50 psi.
1—750 gal. nickel clad Mixing Tank, 125# nickel coils.
1—500 gal. S.S. Mixing Tank with nickel coils.
1—4000 gal. Haveg Vert. Tank 8'x12'.
6—7500, 6000 and 2000 gal. Rubber Lined Tanks.
1—1500 gal. Stainless Pressure Tank, 5'x10', 90#.
1—12,000 gal. horiz. steel Pressure Tank, 7'6"x36', 200 psi.
6—Stainless Heat Exchangers; 1220, 786, 536, 370, 315, 250 sq. ft.
1—Falls Industries 100 sq. ft. Karbate Condensor.
1—24" dia. x 35', 304 S.S. Bubble Cap Column.

FILTERS

1—#5 Sweetland Filter 304 S.S. 120 sq. ft.
1—Oliver 6' dia. Horizontal Filter, 316 S.S.
1—Oliver 5' x 6' Steel Rotary Vacuum Precoat Filter.
1—U.S. 200 sq. ft. 304 S.S. Auto-Jet Filter.
1—Oliver 5'3"x8' Steel Rotary Vacuum, vaportite housing.
1—Oliver 3' x 2' 347 S.S. Rotary Vacuum Filter.
1—Feinc 5'x6' Stainless Steel Rotary Vacuum Filter.
2—#10 Sweetland Filters, 27 leaves, 4" centers, 250 sq. ft.

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1—Buflovak Vacuum Shelf with 20—60"x80" shelves.
1—Devine Vacuum Shelf with 19—59"x78" shelves.
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1—Buflovak 3'x10' Rotary Vacuum Dryer.
1—Baker Perkins 5'6"x6' Rotary Vacuum Dryer.
2—Buflovak 5' x 30', 3' x 7'6" Rotary Vacuum Dryers 316 S.S.
2—Louisville Rotary Steam Tube 6'x25', 6'x50'.
2—Louisville 8'x50' Stainless Steel lined Rotary Dryers.
9—Rotary Dryers 34"x30', 4'x40', 6'x50', 6'x60', 7'x80', 8'x87'.
1—Traylor 30"x18' Stainless Steel Rotary Dryer.
2—Link Belt, 7'5"x25', 6'4"x24", S.S. Louvre Dryers.
2—Atmos. Tray Dryers, 16 shelves, 40"x24".
1—P&S 10' wide Apron Conveyor Dryer 48' long.
1—4' dia. 304 SS Spray Dryer.

MIXERS

1—Farrel-Birmingham "Midget" Banbury Mixer.
2—Day Imperial 150 gal. jktd. double arm.
1—Baker Perkins 100 gal., jacketed, double arm, 30 HP.
1—Baker Perkins #16TRM, 150 gal. jktd., Vac. 60 HP.
1—Baker Perkins 50 gal. jacketed, double arm.
1—Baker Perkins 10 gal. jacketed 304 S.S. double arm.
5—Day "Cincinnatus" double arm, 250 and 100 gal.
2—Steel jacketed Powder Mixers, 225 and 350 cu. ft.
1—Patterson 6' dia. Conical Blender 15 HP.
1—3' dia. Simpson Intensive Mixer.
1—Stokes 21K, 304 S.S. Granulating Mixer 82 gals.

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1—Farrel Birmingham, 8" x 16", 2 Roll Chrome Plated Mill.
2—1SH, 1SI Mikro, Pulverizers, 3 HP.
3—Abbe 2½' x 3' porcelain lined Pebble Mill XP motor.
1—Raymond 10' dia. Single Whizzer Separator.
1—#5 Mikro Atomizer with motor and cyclone.
2—Bantam Mikro Pulverizers, S.S.
1—No. 1 Ball & Jewell Rotary Cutter.
1—#18 Cumberland Rotary Cutter.
3—Swenson Walker Continuous Crystallizers, 24" x 30' sections.
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5255 F1-2—Two MONEL Reactors 2800 gal. 6'8" x 13' with ASME Jacket and internal 175 PSI; Turbine Agitators.

EVAPORATORS — KETTLES — TANKS

3750—Zaremba Double Effect INCONEL Evaporator with calandria; 430 sq. ft. of surface; with accessories.
3870 M2—Mojonnier 3' dia. S/S Calandria Evaporator; 30.5 sq. ft.
5020 S5—Vertical Stainless Lined Mixing Kettle 40 gal. 24" x 21" with Stainless Heating Coils and Agitator.
5020 S8—Stainless Lined 100 gal. Mixing Kettle; 32" x 30" with 6 turns of S/S Heating Coils and Agitator.
3340—Brand NEW Stainless Steel Kettles good for 100# always in New York stock; sizes up to 500 gal.
3994 K4—Stainless Steel Vacuum Still; Coil Htd. 755 gal. 4'6" x 6'; with Aluminum Column.
4840 B36—Electrically Heated 800 gal. Stainless Steel Kettle 60" x 60".
4886 D6—Stainless Steel 500 gal. Vertical Jacketed Agitated Kettle 48" x 67".
4840 B37—Stainless Vertical Kettle 5' x 8'9", 1300 gal. set in a cooling jacket.
5048 D1-2—Struthers Wells Type 316 Stainless Vertical Mixing Kettles, 2000 gal. 6' x 10' Jktd. and Agitated.
5128 M1-2—Two Pfaudler Stainless Steel Jacketed Evaporating Dishes; 6' x 30".
4737 A15—800 gal. closed S/S Tank; 51" x 118"; Coned Bottom; 24" Manhole.
5123 C1-2—Two Horizontal Type "C" Versators in Type 316 Stainless with 20 H.P. Motors.

CENTRIFUGALS CLARIFIERS — SEPARATORS

4926—Squier 30" Suspended Stainless Steel Centrifugal with perforate basket.
5190 D4—A. T. & M. 30" Susp. Centrifuge in Stainless; 2 Speed.
4093 B11—A. T. & M. Susp. Centrifugal; 40" x 24"; Solid Bowl; Bot. Discharge.
5230 L1—Western States Model UD Centrifugal in Type 316 Stainless; 36" x 20"; Vapor Tite; Automatic Loading
4331—Tolhurst Suspended Self Bal. MONEL 40" Centrifuge; Rub. Lnd. Curb 7½" HP.
C5-B200—A. T. & M. 40" Stainless Suspended Centrifugal perforate basket; bottom dump; 40 HP motor.
4750V—A. T. & M. type 316 S/S Vacuum & Pressure Hoods, 60"; link suspended; 15 HP 2 speed motor.

DRYERS — ALL TYPES

5161 B7—Bowen Stainless Steel Spray Dryer; Table Model; 30" x 32".
4055 E2—Nickel Plated Drying Drums 4' x 4'.
3303—Type 316 Stainless Drying Drum; 32" x 52".
4690—Stainless Lined Rotary Counter Current Atmospheric Dryer; 50" x 20' with Oil Burner, Combustion Chamber, etc.
4819 M4—Louisville Stainless Rotary Dryer 30" x 28'; Ind. fired.
5147 S18—Jacketed Rotary Dryer or Roaster; 42" x 12'; Monel shaft and Blades.
5260—Louisville MONEL Rotary Steam Tube Dryer; 54" x 35'.
5161 B8-9—Two Stainless Concentrators; each has Bank of 4 Rotary Vac. Continuous Jacketed Dryers, 2' x 10'; 20 HP.
5164 A3—Type 316 Stainless Pan Dryer; 85" dia. 24" Deep; 250 gal. Jacketed, Agitated; 24" Manhole.

COLLOID MILLS
(Homogenizers, Viscolizers, etc.)

3961 E1-7—Premier Stainless Colloid Mills Type U3; 6"; 15 HP motors.
4827 N3—Cherry Burrell Stainless Sanitary Homogenizer Size 1500; with 25 HP Motor.
4703 G2—Chemicolloid Stainless Steel Colloid Mill Model A 15 with 15 HP Motor; 3525 RPM.
4510—Marco Stainless Homogenizer No. 400 Capacity 750 GPH.
H2 S300—Fitzpatrick Stainless Tritulating Homogenizer 5" Vert. Screw; Jacketed; 3 HP Motor.

FMC Pays MORE For Your Surplus FMC

FILTERS

F15-818—Bird Young 12" x 18" Stainless Rotary Vacuum Filter.
3317—Bird Young Rotary Vacuum Filter; 4' x 4'; Stainless Screens.
5122 M4—Oliver Pressure Pre-Coat Filter 5'3" x 8' in Stainless.
5147 S1-2—Oliver Pre-Coat Panel Type Acid Resistant Vac. Filters 8' x 8' and 8' x 10' complete.
4692 D1-2—Two Oliver Monel Precoat Continuous Rotary Pressure Filters, 3' x 2' with all accessories.
2729—Oliver Dorrco Rot. Vac. Filter 6' x 3' with nickel parts.
F15-193—Stainless Lined 5'3" x 8' Oliver Cont. Vac. Filter Complete.
4685 B1—Feinc Stainless Rot. Vac. Filter; 5' x 6'; String Discharge.
4870 N2—Sparkler Stainless Steel Filter; Model No. 14-S-4.
5092 G4—Sparkler Mild Steel Filter Model 33-14.
5146—Sparkler Jacketed Filter Model 33 S 17; scavenger plate.
F13-803—Sparkler Stainless Filter #33S 28 with Scavenger.
4931 L2-3—Two Alsop Stainless Filters Model SD8; 250 GPH complete with Pump and Motor.

2 STAINLESS 30" MICRONIZERS Complete with ACCESSORIES

MIXERS — ALL TYPES

5250—Readco Jktd. Stainless Steel Dbl., Arm Mixer; 15 gal.; 15 HP.
M26 B4—J. H. Day Imperial Stainless Steel 30 gal. Vacuum Mixer with 30 HP XPL Motor.
M25 401—Baker Perkins Stainless Steel Unjacketed Mixer; S.S. 33" 32" x 36"; 20 HP Motor.
5223 C-3-4—Two Lehmann Amalgamators; Stainless Lined; 32" x 44" x 36"; Stainless Arm; 7½ HP.
5070 F4—Stainless Steel Double Arm Vacuum Mixer; 150 gal.; 44" x 44" x 36" with cored blades; 40 HP Motor.
M25-501—J. H. Day Stainless 250 gal. Jktd. Mixer with Sigma arms; geared both ends.
4702 B1—J. H. Day Cincinnatus Stainless Steel 300 gal. Jacketed Double Arm Mixer.
5070 F1-2—Stainless Lined Double Sigma Vacuum Mixers 300 gal. 56" x 50" x 44"; with 60 HP Motors.
5252—Patterson-Kelly Stainless Twin Shell Blender; 30 cu. ft.
5164 A1—Patterson-Kelly Stainless Twin Shell Blender; 150 cu. ft. 60" diam. 10 HP XPL Motor.
1793 D8—J. H. Day 2½ gal. Pony Mixer; Stainless Paddles and Can; ½ HP motor.
4305 P3—Baker Perkins Cascade Mixer Installation; fully jacketed 250 PSI; Type 316 Stainless.

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209-289 TENTH STREET, BROOKLYN 15, N. Y. • STerling 8-4672

JUST PURCHASED

2—Davenport 8' dia. x 60' long rotary dryers, 7/16" welded shell, internal flights, combus. chambers, fans, controls, burners, etc. Like new!

1—Louisville 7' x 70' rotary cooler or dryer, ½" welded shell, complete. 1952. Like new!

1—Patterson 6' dia. x 10' long porcelain lined pebble mill, jacketed. Like new!

DOUBLE ARM MIXERS

60—200 gal. Baker Perkins #17, sigma, blades jacket.
1—150 gal. Baker Perkins #16, sigma, jacket.
3—100 gal. Baker Perkins #15, sigma, jacket, 25 HP.
1—100 gal. Baker Perkins #15-uumm, dispersion blades, cored, 100 HP. compression cover, jacketed, motorized tilt.
1—100 gal. J. H. Day, stainless, sigma, 10 HP.
4—75 gal. J. H. Day Imp., disp. blades.
1—20 gal. J. H. Day, #2 Cinc., sigma, jacket.

CENTRIFUGALS—FILTERS

37—Sharples #AS-16V contin. cent., inconel.
3—Sharples #C-27 Super-D-Hydrators, T316 SS.
3—Sharples size #C-20 super-d-hydrators, T316 SS.
1—Tolhurst 48" dia. susp. batch centrif., T304 SS, perf., 15 HP.
6—A.T. & M. 40" dia. susp. batch centrif., T304 SS, HP.
1—26" Tolhurst susp. basket centrifugal, steel.
1—12" A.T. & M. susp., T304 SS perf. basket.
1—Niagara #510-28 T316 SS filter, 510 sq. ft.
1—Niagara #53-36, T304 SS filter, 53 sq. ft.
2—Sperry P. & F. filter presses, ni-resist, 210 sq. ft.
1—Kelly #50 steel press. filter, 50 sq. ft.
2—Sweetland #7 steel press. filters, 117 sq. ft.
1—Oliver 5'3" dia. x 8' face rot. vac. filter, precoat, unused.
2—Oliver 5'3" x 3' rot. vac. filters, T316 SS, precoat, ASME.
1—American 4' dia. rotary vacuum disc filter, 3-disc.

PEBBLE MILLS

1—Patterson 6' x 10', porox lined, jacketed.
2—Patterson 8' x 10', batch mills, buhrstone lined.
2—Hardinge 7' x 36" conical pebble mills, buhrstone lined.
1—Allis Chalmers 6' x 18' burhstone lined.
1—Crosley 6'8" x 7', batch mill silex stone lined.
13—Abbe Eng. 6' x 8', batch mills buhrstone lined, 30 HP.
1—Porter 6' x 5', batch mill buhrstone lined.
1—Abbe 5' x 6', batch mill buhrstone lined.
2—Patterson 4'6" x 12' contin., buhrstone lined.

DRYERS—EVAPORATORS

1—Mojonnier 1550 sq. ft. T304 SS evap., triple effect, sanitary, with preheaters, finishing pan, etc.
1—Buflovak 700 sq. ft. forced circulation evaporator, single effect, T304 SS. Late model—like new!
1—Struthers-Wells 630 sq. ft. T316 SS calandria type evap.
1—Buflovak 5' x 30' rotary vac. dryer, T316 SS, ASME.
1—Buflovak 3' x 7' rotary vac. dryer, T306 SS, ASME.
1—Stokes #59A, 18" x 42" rotary vac. dryer.
1—Buflovak vacuum shelf dryer, 227 sq. ft., lithcote lined.
2—Buflovak vac. shelf dryers; 110, 98 sq. ft.
1—Devine vac. shelf dryer, 80 sq. ft.—Unused.
2—Pilot size 4' dia. spray dryers, T304 SS, elec. heating.
1—Buflovak 42" x 120" double drum dryer, ASME, 125# wp.
1—Buflovak 42" x 90" double drum dryer, w/conveyors, etc.
1—American vacuum 36" x 84" double drum dryer.
1—Buflovak 5' x 12' single drum vacuum dryer—Unused.
1—Link-Belt #604-18 Roto-Louvre dryer, 6'4" x 18' long.
1—Link-Belt #310-20 Roto-Louvre dryer, 3'10" dia. x 20' long.
1—Standard 3' x 23' rot. dryer, 1/4" welded shell, flights.

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Ten Million Dollar Chemical Plant

NORTH JERSEY AREA

Type 316 Stainless Steel Equipment

7—Alloy Fabricators Type 316 SS pressure vessels, 4500 gals., complete with agitators and drives, 45 psi.
2—Alloy Fabricators Type 316 SS, 4500 gals., jacketed reactors, complete with agitators and drives.
2—Alloy Fabricators Type 316 SS, 1000 gals., jacketed kettles, ⅜" material throughout.
12—Whitlock Type 316 SS pressure vessels with coils, 270 gals.
3—Type 347 SS pressure vessels with coils, 300 gals.
3—Type 316 SS mixing tanks, 6000 gals., complete with agitators and drives.
8—Acme Type 347 SS settling tanks with cone bottoms, 1000 gals.
1—2600 gals., Type 316 SS vertical vacuum receiver.
3—Vertical Type 316 SS activated carbon absorbers, 5'4" dia. x 16'.
1—Struthers Wells Type 316 SS, 500 lbs. pressure vessel, 75 gals., ASME code, National Board.
2—Project Fabricators Type 316 SS vacuum receivers, 160 gals.
2—Pfaudler 500 gals., glass lined jacketed kettles.
1—Pfaudler 20 gals., glass lined vacuum receiver.
1—Haveg 500 gals., vacuum receiver.
2—Aluminum horiz. 5000 gals., storage tanks.
5—Pfaudler horiz. glass lined storage tanks, 5000 gals.
1—Pfaudler vertical glass lined storage tank, 5000 gals.
2—Rubber lined tanks, 2500 gals., working pressure 45 lbs.
4—Rubber lined horiz. storage tanks, 5000 gals., working pressure 45 lbs.
16—Rubber lined vertical storage tanks, 4500 gals., working pressure 45 lbs.
4—Patterson Kelley SS condensers, 500 sq. ft.
7—Stainless steel condensers from 50 to 300 sq. ft.
4—Stainless steel packed columns, 18" x 15'.
2—Shriver 18" x 18" SS plate and frame filter presses, 10 chambers.
5—Shriver 42" x 42" wood plate and frame filter presses, complete with hydraulic closing device, 30 chambers.
7—Buflovak Type 316 SS jacketed rotary vacuum dryers, 5' x 30', complete with 25 HP explosion proof motors and drives.
3—Type 316 SS Ter-Meer continuous type centrifuges 4' dia. bowls complete with motors.
3—Readco SS jacketed horiz. blenders, complete with explosion proof motors and drives.
3—Mikro #3TH SS pulverizers, complete with 40 HP explosion proof motors.
1—Mikro SS bantam pulverizer, Model CF, complete with 3/4 HP explosion proof motor.
3—Gruendler SS, lab size, pulverizers.
2—Nash, Model HS-6, Hastelloy B vacuum pumps, with 25 HP motors.
3—Nash, Model HS-6, Type 316 SS vacuum pumps, with 25 HP motors.
3—Nash, Model TS-12, vacuum pumps, with motors.
1—Stokes Type 316 SS, jacketed, rotary vacuum dryer, 2' x 3'.
14—Copper jacketed mixing kettles, 3500 gals. each.
14—Copper jacketed rotary vacuum dryers, 8' x 10'.
5—American Type 316 SS blowers, Model MD, size 27".
6—200 gals., Type 316 SS vacuum receivers.
1—Fuller Type 316 SS, airveying system.
1—Aldrich Type 316 SS hydraulic triplex pump, size 2-3/4"x4", 500 psi.
1—Quimby Type 316 SS twin screw pump with 10 HP variable speed drive.
2—Powell Type 316 SS 10" hydraulically operated flanged gate valves.
2—Tyler Type 38 tandem SS Hum-Mer screens, size 42" x 9'-8".
50—Stainless steel and aluminum hoppers, all sizes.
100—Stainless steel centrifugal pumps, all makes and sizes.
3—200 gals., Type 316 SS jacketed kettles.
12—Type 316 SS Cyclone separators, 5'-2" x 10'-8" overall.
500 Tons of Type 316 SS pipe, fittings and valves, ranging from 2" to 6".
500 Tons of structural steel.
12—125 HP vertical agitator drives with Philadelphia drive, output speed 15.
2—150 HP vertical agitator drives with Philadelphia drive, output speed 15.
16—40 HP horizontal drives.

Our 75th Year

R. GELB & SONS, INC.
EST. 1886
UNION, NEW JERSEY **MUrdock 6-4900**

EQUIPMENT
for CHEMICAL AND ALLIED INDUSTRIES

1—Buflovak stainless steel rotary vacuum dryer, 3' x 15'.

2—Struthers Wells type 316 SS 2000 gal. jacketed reactors, complete with agitators and drives.

2—Monel 2500 gal. jacketed autoclaves, 175# jacket, 175# internal.

2—Pfaudler glass lined jacketed reactors, complete with agitators and drives, 200 gals., each.

1—Nooter 100 gal. stainless steel reactor, complete with agitator and drive.

1—Struthers Wells type 316 SS 400 gal. reactor, complete with coils, agitator and drive, 250# coils.

1—Hersey stainless steel rotary dryer, 3' x 16'.

1—Allis Chalmers SS 6' x 50' rotary dryer complete.

2—Louisville stainless steel rotary dryers, 8' x 50'.

1—General American 7' x 40' rotary dryer, 3/8" welded shell.

1—Baker Perkins Size 4, laboratory mixer, sigma blades, 1 gal. total capacity.

1—Stewart Bolling 2 roll rubber mill, 6" dia. x 12".

1—Stainless Steel packed column, 18" x 9'.

4—Sperry stainless steel filter presses, P&F, 24" x 24", closed delivery, 12 chambers.

1—Niagara Stainless Steel filter, Model 510-28.

1—Richmond Engineering type 316 SS, 40 cu. ft., double ribbon blender.

10—Robinson stainless steel double ribbon blenders, 255 cu. ft.

1—Banbury #1 mixer, chrome plate rotors, complete with 50 HP motor.

1—Williams, "Comet" 4 roll mill, complete.

1—Baker Perkins double arm, jacketed, sigma blade mixer, Size 16 TRM, 150 gal.

25—Davis Engr. SS heat exchangers, 104, 121, 139 and 168 sq. ft., NEW.

1—Downington Type 316 SS heat exchangers, 750 sq. ft.

1—Cleveland SS double cone blender, 85 cu. ft. working capacity, complete with motor and drive.

1—Oliver SS rotary vacuum precoat filter, 3' x 4'.

1—Stokes #412F vacuum pump, complete with motor.

4—Tolhurst 40" rubber covered, center slung centrifuges, complete with perforate baskets and motors.

8—Western States 40" Type 316 SS, suspended type centrifuges, complete with perforate baskets, plows and 40 HP motors.

R. GELB & SONS, INC.
UNION, NEW JERSEY Est. 1886 MUrdock 6-4900

SPECIALS
Atomizer: Mikro type 5MA, st. steel.
Disintegrators: Rietz RD18-P and RD-12.
Homogenizer-Disperser: Tri-Homo #10, #4.
Dryer: American 24x48" dbl. drum.
Dryer: Bowen lab. spray, st. st.
Evaporator: Buflovak sgl. eff. st.st. 94 sq. ft.
Dryer: Porter 2 x 4' vac. drum, st. st.
Centrifugal: Tolhurst 26" rubber. 2-speed.
Filter: Sweetland #5 st. st. lined.
Filter: Eimco, drum 16" x 12".
Heat Exchangers: st. st. tubes, 400 sq. ft.
Dryer: Devine #7, 13 shelves 60" x 7'.
Centrifugal: Tolhurst 20" type 316 st. st.
Centrifugal: AT&M 60" st. st. perf.

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ROTARY DRYER
6 x 7 x 40' long Rotary Flame Dryer. Complete with fire-box Motor drive, Fans & Cyclones. Extra heavy insulated shell.

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New Jersey Pony Labeler Model 86 MX MD.
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350-500-1000 gallon Stainless Tanks.
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Devine Vac Shelf Dryer—takes 8 shelves.

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Day 80 gal. Gearless Pony Mixer 10 HP mtr.
Bird 18"x28" Continuous Cent. Filter.
Gruendler "BB" Whirlbeater Hammer Mill.
Day 40 gal. Pony Mixer, w 5 HP motor.
2 Preformers, Stokes RB2 & Colton #5¼.
3 B&J Cutters, size ½—lab. & midget.
New Howes 3'x5' Sifter w/½ HP motor.
Day #5 Cinn. Mixer, sigma arms, 7½ HP.
Abbe 5'x6' Jktd. Ball Mill, chr. mang. steel.
Pfaudler 1500 gal. Glass Tank; closed top.

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1—400 gallon stainless steel jacketed and agitated reactor.

5—80 gallon type 347 stainless steel autoclaves, 500 PSI.

2—Stokes rotary vacuum dryers, 18" x 42", 2½' x 8'.

1—Baker Perkins 200 gallon jacketed double arm mixer.

6—Rotex sifters 20" x 48", 40" x 84", 40" x 120", single and double deck.

1—Sperry 12" x 12" stainless steel filter press.

4—Pebble mills, 400, 250, 50, 15 gallons.

5—Lee 300 gallon jacketed stainless steel kettles.

1—24" x 18' type 347 stainless steel stripper column.

3—Stainless steel tanks, 17,850, 1200, 1000 gallons.

1—75 gallon jacketed and agitated nickel clad reactor.

1—International 10 cu. ft. stainless steel conical blender.

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chemical & process machinery corp.
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CHOICE EQUIPMENT
1—Hercules 16" x 16" Stainless Steel Filter w 24 plates & frames.
4—Hercules 8" x 8" Stainless Steel Filters w 12 plates & frames.
5—Shriver #1 and "OO" Diaphragm Pumps.
1—Stainless Steel 30 gal. Autoclave 1000 psi w/Jacket & Agitator w/XP Motor.
1—Cyclotherm Package Boiler 250 psi, 600# hr.
4—Stainless Vacuum Receivers 50 to 100 gals.
8—Jack. Stainless Kettles 75 to 100 gals. and 200 gals. closed.
1—Horiz. Spiral Mixer, 3' x 12', Jacketed.
3—Spiral Blenders 800 to 2000#.
1—Patterson 5' x 6' Jack. Ball Mill 25 H.P.
1—Raymond #3036—3 Roll High Side Mill.
2—Stainless Tanks 500 & 600 gals.
1—Stokes Drying Cab. #38—16 shelves.
1—Elgin S.S. 2 Piston Filler.
1—O & T—60 gal. Pony Mixer.
1—N. J. MX Pony Labeler.

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PULVERIZER—3 HP #00 Sturtevant—10HP 2TH Mikro—30 HP Raymond—50 HP 3TH Mikro (unused).

DUST COLLECTOR—Mikro Model 36-1-84—Sly 43"x77"x73½" H-459-D.

SCREENS—12"x72" S/S—20x84 Rotex—20x96 Rotex—3x5, 3x10 Tyler Hummer—30x68 Jeffrey.

MIXERS—1 c.f., 20 c.f. double cone—30 c.f. Patterson Kelly—12 c.f., 22 c.f. Ribbon—40 gal. S/S Pony—60 gal. Post—1 HP 1150 RPM Lightnin'.

FEEDERS—4¼"x24", 24"x72" Syntron S/S—Draver controlled rate, Hardinge Constant Weight.

AIR CLASSIFIERS—Gayco 30"—Sturtevant 36"—Gayco 5', all w/motor drives.

KETTLES—24x30 S/S 125 PSI, Jacket 75 PSI—S/S lined 150 gal. 40 PSI, Jacket 75 PSI.

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LAWLER PLACE METUCHEN, N. J.
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EQUIPMENT OFFERED

Reaction kettles—Synthetic Resin Units 1-18,000 lb. charge stainless with agitator coils condensors, etc. including new "Selas" gas heating unit. 1-13,000 lb. charge stainless with agitator coils, condensors, etc. heated by a "Trent" electric jacket 1-10,000 lb. charge stainless with agitator coils, condensors, receiver etc. jacketed for "Arochlor" electric heater. All kettles in equal to new condition and being replaced by larger units by new resin manufacturer. Write OPD 1006.

Liquidation: Complete Paint Plant. Day Hy-R-Speed Mills, Pebble Mills, Roller Mills, Pony Mixers, Brighton and Post Mixers, Laboratory 3 Roll Mill, Portable Agitators, Crandall Sealer, Electric Lift Truck, Laboratory Ovens, etc. Late type equipment. Still installed. Sterling 8-1990. OPD 104.

EQUIPMENT WANTED

Chemical Company planning expansion seeking stainless, nickel and alloy processing equipment for lab pilot plant and commercial production. Will consider purchase of complete plant or other suitable arrangements. Prompt action offered in confidence. OPD 1007.

EQUIPMENT WANTED

Dryer—Continuous Apron Conveyor type. Total drying area approx. 250 sq. ft. Apron construction, stainless steel. Hammer Mill—No. 3 Mikro or equivalent. Mixer—Double arm, blade tilting type, 300 gal. working capacity. Steam jacketed. 40 H.P. Stainless steel construction. Rotary Air Locks—8"—12". Ball Mill—6' x 10' Jacketed. Chrome Manganese Steel. Stainless Reactor—Min. size 6'6" x 8'. Must be built for 100 PSI pressure. 3 Stainless Steel Condensors —200 to 400 sq. ft. of tube surface. Please include price information with full particulars in the first letter. Indicate if you own the equipment and where it is available for inspection. Write OPD 1005.

Wanted—Any quantity of 55 gallon I.C.C. 5C Stainless Steel Drums. OPD 1004.

FACILITIES OFFERED

Spray Drying: Foods, Pharmaceuticals, Chemicals, etc. Complete stainless equipment, including sanitary piping, pumps, mixing tanks and packers. Located New York area on railroad siding. Available on contract or unit volume. When inquiring give full particulars. Write OPD 109.

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50,000 Tower packing rings ceramic, single spiral with corrugated outer surface 3¼" O.D., 3"L, 5/16" wall thickness. Price way below cost Industrial By-Products & Surplus Co. 40-40 Lawrence Street, Flushing 54, New York. INdependence 1-4100.

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Aluminum Condenser, 350 sq. ft.
4—24" Filter Presses, Stainless Steel fittings, wood frames.
Lapp Fittings, Valves.
1—Procter & Schwartz finned Drum Drier.
Continuous Stripping Column 2 x 13.
Aluminum Evaporator, Calandria type, 1300 sq. ft.
Ribbon Blenders, Hydraulic Pumps.

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Modern Rebuilt Machinery

UNION Rebuilt Machinery Established 1912

At Bargain Prices

Baker Perkins and Day 50 and 100 gal. Stainless Steel Double Arm Mixers.
Day 50 gal. Gearless Pony Mixer.
Kent 5 Roll High Speed Mill.
Sperry & American Seitz Stainless Filters.
Knapp Wraparound Labeler.
S & S Models HG84 and HG88 Automatic Powder Fillers.
Stokes & Smith 90D Auto. Tube Filler.
Colton 6 ft. Stainless Steel Blending Pan.
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USI Is Moving Ahead

—Continued from page 5

rapid delivery to USI customers for ammonia, aqua ammonia and nitrogen solutions, especially during the heavy seasonal demand in early spring.

The new 6,000 ton storage tank will use refrigerated ammonia at atmospheric pressure, rather than storing it in pressurized tanks at moderate temperatures.

The storage vessel consists of an inner tank, eighty-eight feet in diameter and fifty-six feet high, separated from an outer tank by two and a half feet of insulation. Liquid ammonia is stored in the tank at a temperature of about minus 28 degrees Fahrenheit and this low temperature is maintained by evaporation of ammonia from the surface.

The evaporated ammonia is then used as feed stock for the adjoining ammonium nitrate unit. It can also be recompressed and recirculated to the tank if necessary.

Current Market Quotations

—Continued from page 29

Zinc phenolsulfonate, NF, gran., dms.	lb.	.45 - .46
NF, powd., dms.	lb.	.48 - .49
Zinc resinate, precip, 7.2-7.6% Zn., dms., frt. alld	lb.	.40¼- —
Zinc silicofluoride, dms., works	lb.	.12½- .14
Zinc stearate, tech., USP, ctns., c.l.	lb.	.41 - —
ctns., l.c.l.	lb.	.42 - .46
Zinc sulfate, powd., monohydrate, 36% Zn, bgs., c.l., dlvd.E.	100 lbs.	8.75 - —
bgs., l.c.l., dlvd. E	100 lbs.	9.75 - —
Zinc sulfate in bbls 40c. higher.		
Zinc sulfide, pure, bgs., c.l., dlvd	lb.	.2530- —
Zinc undecylenate, dms.	lb.	2.00 - —
Zinc, yellow (see Zinc chromate).		
Zinc-ammonium chloride, bgs., c.l., works	100 lbs.	10.25 - —
bbls., c.l., works	100 lbs.	10.85 - —
bbls., l.c.l., works	100 lbs.	11.35 - —
Zinc formaldehyde sulfoxylate, basic, 300-lb. dms., frt. alld	lb.	.26 - —
Normal, 250-lb. dms., frt. alld	lb.	.52 - —
Zircon (G) gran., bgs., c.l., works.	lb.	.03½- —
bgs., 5 tons to c.l., works	lb.	.03⅝- —
bgs., 1 ton to 9,999-lb. lots, works	lb.	.04 - —
bgs., smaller lots, works	lb.	.06½- —
Zircon (G), milled, bgs., c.l., works.	lb.	.04¼- —
bgs., 5 tons to c.l., works	lb.	.04⅜- —
bgs., 1 ton to 9,999-lb. lots, works	lb.	.04⅝- —
bgs., 500-1,999-lb. lots, works	lb.	.07½- —
Zircon (G) in barrels 1c. higher.		
Zirconium acetate soln., 13% ZrO_2, dms., c.l., 30,000 lbs. min., works	lb.	.23 - —
Zirconium hydride, powd., electronic grade, dms., works	lb.	14.00 -15.00
Zirconium oxide, CP, white, grd., bbls. or bgs., works	lb.	1.50 - —
Electric-fused lump, bgs., 500 to 1,999-lb. lots, works	lb.	.48½- —
bgs., smaller lots, works	lb.	.51 - —
milled, bgs., c.l., works	lb.	.62 - —
bgs., 5-ton lots, works	lb.	.62½- —
bgs., 1-ton to 9,999-lb. lots, works	lb.	.63½- —
bgs., 500 to 1,999-lb. lots, works	lb.	.64 - —
bgs., smaller lots, works	lb.	.66 - —
Zirconium Oxide, Glass polishing grade, 94-97% ZrO_2, bgs., works	lb.	.55 - .65
Opacifier grade, 85-90% ZrO_2, bgs.,	lb.	.27 - .50
Stabilized oxide, 91% ZrO_2, milled, bgs	lb.	.62 - .85
Zirconium oxychloride, cryst., ctns., 5-ton lots, works	lb.	.37½- —
bgs., l.c.l., smaller lots, same basis	lb.	.16⅝- —

Carbide's 'Hello' to Shell

—Continued from page 4

acrolein is a unique building block that could eventually rank with ethylene oxide as a basic chemical raw material. At present, its single commercial application reportedly is in the manufacture of methionine.

Shell will divert most of its considerable acrolein capacity—an estimated 30 to 40 million pounds a year—to glycerine which is also being manufactured at the Norco facilities.

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Oils, Fats and Waxes

—Continued from page 57

steady. Cash lard was held at 11.70c. per pound, drums, Chicago.

Tallow—Trading was quiet and prices declined ⅛c. Offers were limited and well held. Bleachable fancy was quoted at 5⅞c. per pound, tankcars, delivered; prime, 5⅝c. guaranteed fancy, 6¼c.; special, 5⅜c. and No. 1, 5c., same basis. Export interest lagged. Guaranteed fancy in bulk was nominal at 6½c. per pound, f.o.b. and 1c. higher for drums, f.a.s.

Menhaden—Slackened demand for domestic and export weakened the market. Crude oil declined to 6c. per pound, tankcars, f.o.b. works. Fishing was reported moderate in the Atlantic and Gulf. Refined light pressed oil was unchanged at 9½c., tankcars, New York basis.

Sperm—Market continued strong because of the scarcity of supplies. Demand was active, with sellers compelled to restrict sales to regular customers. Natural winter was held at 12¾c. per pound, tankcars, and bleached winter, 1c. more.

Cake and Meal

Cottonseed Meal—Trading in new crop meal was light. New crop was offered at $53 per ton sacked, Memphis, September-through December and $56.50, in the southeast, same basis.

Linseed Meal—Dullness persisted in this market, purchases confined to small lots for nearby needs. Prices were lower off 50c. per ton for prompt delivery. September supplies were offered by re-sellers at $53 to $54 and October-December, $53.50 to $54.50, trading virtually nil. Extracted meal, 34 percent protein, was quoted at $52.50 a ton, bulk, carlots, f.o.b., Minneapolis, for prompt delivery. Old process meal at $58.50 for August and $61.50, September-December.

Soybean Meal—Stronger tone developed in this market, sparked by purchases of September requirements by a ranking formula feed manufacturer. Export demand also active helped clean up surpluses that had been pressing on the spot market. Prices in most markets advanced $1 to $1.50 per ton. Meal for unrestricted billing was quoted at $48.50 a ton, bulk, Decatur, for prompt shipment.

Waxes, Vegetable

Consumer interest for vegetable waxes was reported improved, though actual trading was still spotty, chiefly for prompt delivery. Steady tone continued to prevail in carnauba wax, the market reflecting the strength of primary sources. Stocks of carnauba grades were fairly liberal on spot, and firmly held at former quotations.

Tight supply situation prevailed in bayberry wax on spot. Stocks were scarce and higher because of the sharp advance of replacements from sources. Demand has improved and quotations for spot material ranged from 65c. to 70c. per pound, depending upon quantity and seller.

Chemical Stocks

—Continued from page 4

$3.9 million in July last year, and for the first seven months they totaled $711.8 million against $734 million last year.

In the paper and printing industries, July cash dividends amounted to $18.7 million against $18.2 million last year, and $153.6 million for the first seven months of this year, compared with $147.3 million for the same period of 1959.

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Herbicide, Term contract, indefinite quantity, Bid IFB DA-39048, Sept. 6. General Services Administration, Business Service Center, Region 7, 1114 Commerce St., Dallas, Texas.

Heavy Chemicals, Caustic Soda, Sulfur, Trisodium Phosphate, Sodium Aluminate and Soda ash. Quotations are requested by Abraham David Mahlab, Bank Street, Khan alBorsa, Room 2, (P.O. Box 234); required for an Iraqui Government Department. Bid deadline is August 30. Bidding instructions are available from The Trade Development Division, Bureau of Foreign Commerce, US Department of Commerce, Washington 25, D.C.

Liquid Nitrogen, commercial quality, est. for contract term: 100,000 gals. Bid IFB 11-61, August 24. National Bureau of Standards, Purchasing Office, Boulder, Colo.

Methanol Reagent, 90,072 gals., Spec FED O-M-232H IFB 155-260-61B, August 26. General Stores Supply Office, 700 Robbins Ave., Philadelphia 11, Pa.

Pine Oil, 4,855 gals., Bid IFB 155-262-61B, August 26. General Stores Supply Office, 700 Robbins Ave., Philadelphia 11, Pa.

Trichloroethylene, Tech., 184,800 lbs., BEP No. 24, schedule 34, Sept. 15. Procurement Officer, Bureau of Engraving and Printing, Fourteenth and C Streets, S.W., Washington 25, D.C.

Trichloroethylene, Tech., type II, est. 4,158,000 lbs., in 55 gal. drums, containing 660 lbs. net content. Fed Spec O-T-634A, dated April 17, 1956, Bid IFB 61-15, Sept. 1. Open end contract for a period of 12 months, effective Oct. 28, 1960. US Army Chemical Procurement District, New York, 290 Broadway, New York 7, N.Y.

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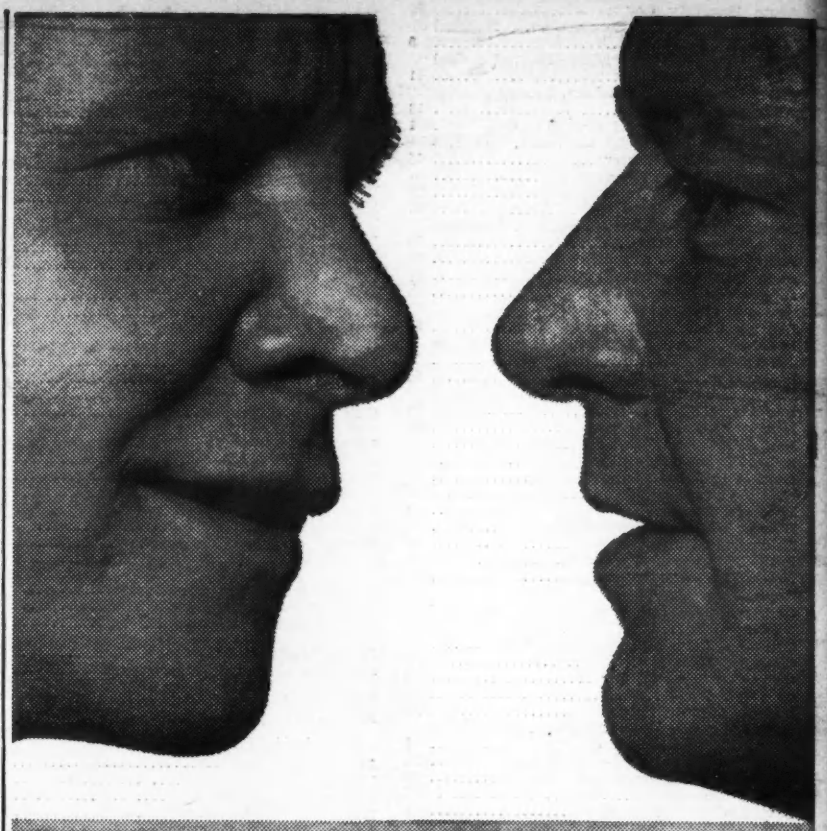

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